## PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, JUNE 14, 1884.

## ORIGINAL LECTURES.

### CLINICAL LECTURE

ON TUMORS OF THE FOOT AND HAND, AND OF THE SYNOVIAL SHEATHS; WITH REMARKS ON ETHER-ANÆSTHESIA AND ITS PRODUCTION BY THE RECTUM.

Delivered April 16, 1884,

BY ROBERT F. WEIR, M.D.,

Surgeon to the New York Hospital, Professor of Clinical Surgery in the College of Physicians and Surgeons, New York.

(Reported for THE MEDICAL TIMES.)

YOU will remember, gentlemen, that last week we removed a tumor the size of a chestnut, which I told you was rather rare for the locality in which it had developed,—namely, in the sole of the foot. This has been examined microscopically and has been found to be pure fibroma.

The little patient before us illustrates the old adage, which applies in surgery as well as in the other affairs of life, that troubles never come singly, or, as we say at the hospital, rare diseases come in pairs. I have to-day another tumor to present to you; not, however, of the sole of the foot, but of the palm of the hand. There are several varieties of tumors which may show a special disposition to develop in these situations, and particularly upon the Sebaceous tumors are rare, for anatomical reasons; but fatty, fibrous, or sarcomatous tumors are more common. Not infrequently cartilaginous tumors form about the joints of the fingers. Several years ago I had occasion to amputate the ring-finger of a distinguished practitioner for a sarcoma of the proximal phalanx: no recurrence has yet taken place. Eight years ago I removed also a spindle-celled sarcoma from the thumb of a violinist, without recurrence to the present time. In fact, I may here state that this case, and two others of spindle-celled sarcomata located adjacent to or in the aponeurotic structure, confirm the favorable prognosis given in such cases by Virchow. Tumors of these varieties are alluded to more or less fully by surgeons, but they lay little stress upon a certain form of neoplasm which may develop at the wrist or ankle,

or along the sheath of the tendons of the hand or foot. I refer to sarcoma, a disease which hitherto has been very seldom found developed in the sheath of tendons. Four such cases have been recently collected by Dr. Markoe, two of which I saw with him at the New York Hospital, and an additional one has recently come to my knowledge. Some of you have seen the latter case at the college clinic, it being one of tumor developing upon the dorsum of the hand in a young Italian girl. It looked to the general view like an ordinary compound ganglion (meaning by ganglion a secretion of fluid underneath the sheath of the tendons, which we so frequently find just below the wrist, making a projection there which we often disperse by a sharp blow with a heavy book, rupturing it subcutaneously). This tumor involved the sheath of the tendons. and, instead of having, on being opened, the honey-like fluid containing rice-like bodies or fibrous masses due to inflammatory action, there was a pultaceous, semiorganized substance, which under the microscope presented all the elements of a spindle-celled sarcoma, exactly as did all the cases reported by Dr. Markoe; and, to complete the history, recurrence has lately taken place.

You will notice that in this little girl, from whom we removed the tumor of the foot last week, there has been no inflammatory reaction whatever. The wound was not closed, but dressed with an iodoform compress, and it has done perfectly well since. It requires a little time to heal up from the bottom. It is even more important in operative wounds of this kind upon the sole of the foot than in similar wounds upon the palm of the hand to dress them openly, for the patient is liable at any time to step upon the foot or strike it against something and set up an inflammatory action which may lead to

that dread disease, tetanus.

In operating upon this little boy for the removal of the tumor on the hand, I propose to employ a novelty in surgery in connection with the use of ether as an anæsthetic.

You know that in this country we commonly give ether by a cone, usually improvised out of a towel which is stiffened by paper inserted within its folds. The paper also serves to prevent the too rapid evap-

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oration of the ether. Some make the cone open at the distal end, to admit of the freer entrance of air and to effect evaporation of the anæsthetic more rapidly, but that is not necessary, for a sufficient degree of air will gain entrance around the cone where it is applied over the face, or through the various openings in your cone. The ether-inhaler of Allis, which I show you, is intended to take the place of a cone, and by its numerous folds of bandage gives a large evaporating surface, and, as a rule,

acts quickly. It is only comparatively recently that ether is beginning to take the place of chloroform in foreign countries, and particularly so in England. Dr. Jeffries, of Boston, went over to that country five or six years ago, and demonstrated to English surgeons the comparative safety of ether and the ease with which it could be administered, and since then this anæsthetic has come into fair use in that country. But they were struck with the very lavish manner in which American surgeons used the ether, pouring and washing it in a prodigal way on the cone, and they, being of a more economical turn of mind set about devising means by which it could be economized. In America we do not think of going out to perform an operation requiring an anæsthetic without taking at least half a pound of ether with us, and often a pound.

Among the apparatus devised by the English, here is one by Ormsby, by which the quantity of ether necessary to anæsthetize the patient and do an operation is reduced to one or two ounces. By this apparatus the escape or evaporization of the ether is prevented by a rubber bag attached to a metallic mouth-piece, and its anæsthetic influence is enhanced by compelling the patient to breathe over again the carbonic acid coming from the lungs. This method, however, causes a greater amount of lividity and asphyxia than that which allows the patient a greater amount of fresh air. The lividity is sometimes so great that it has caused me anxiety lest serious trouble might take place; but no accident has been known to result from it

when given in this way.

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breathing atmosphere containing ether. One of my colleagues states that he always has a sick headache from the ether used at his operations.

Here is another ether-inhaler, known as Clover's, a modification of Ormsby's in some little particulars, and yet those slight modifications make the apparatus much superior in value. It is supplied with a simple contrivance which easily regulates the supply of fresh air, and so saves the necessity of removing the entire apparatus

from the patient's face.

Last spring, M. Mollière, a distinguished surgeon of Lyons, France, whom many of you probably know of through his admirable work on diseases of the rectum, was walking through his wards, accompanied by a gentleman from Copenhagen, who, learning that ether was used as an anæsthetic, inquired of him how he gave it, whether by the mouth or by the rectum. Dr. Mollière was quite astonished at the question, but was told that in Copenhagen they were in the habit of giving ether by the rectum. This was novel to him, and he immediately set to work to institute trials of the method of administration, and he has lately, in the Lyon Médical of last month, published a number of cases in which the anæsthetic was successfully resorted to in this way. He put some ether into a bottle, which was connected with a tube leading into the rectum, and, putting the bottle into hot water, say of a temperature of 130° F., evaporization began to take place rapidly, and the vapor passed through the tube up into the intestine, and, there being absorbed, produced its anæsthetic effects. In some cases he used it only to keep up the anæsthetic state first produced by the cone, while in others this method alone was made use of to produce insensibility. The time required to put the patient under the influence of the ether administered in this manner varied from four to twelve min-

Now, you may think that this is only amusing, and not of practical use. But it is of practical use, and I may be able to demonstrate its value upon a patient today who has hare-lip. It has special advantages in connection with operations upon the face. In such cases we have, by the usual method, to put on the ether cone, get the patient under the influence of the agent, and then remove the cone and pro-

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There is one objection to the method, which one might foresee, and that is that the introduction of the tube, even without the ether-vapor, which is more or less irritating, will sometimes cause the act of defecation. In Dr. Bull's case, although the bowel had been moved by an injection, the tube caused a passage and temporarily interrupted the operation. Mollière says defecation does not occur in every case; but, even if it did so, it would be but a slight objection compared with the great advantage it would be to have, as just stated, such a means of producing insensibility in cases demanding the removal, for instance, of the lower jaw, or a plastic operation about the mouth.

In this connection, the theoretical question has suggested itself to my mind whether ether might not be administered in sufficient quantity by the mouth to be absorbed by the stomach to produce insensibility. If it were to cause too much irritation if taken in the concentrated form, perhaps it might be effectually taken diluted; or might it not be administered hypodermically? These questions, of tious anæsthesia.

course, are only speculative. I do not know that the idea has ever been put to practical demonstration. In fact, a second thought tells me that the hypodermic use is stimulant in its effect, though, so far as I know, only small quantities have been so used, and without local irritation.

While this boy is now being put under the influence of ether according to this method, it may not be uninteresting to you to know something further with regard to the comparative safety of ether and chloroform. When you go out into practice, you will meet with physicians who will tell you they believe chloroform to be perfectly safe, for they have always made use of it in operations and have never met with a single mishap. But remember it is the large collection of figures that tells the story; it is the observation of hundreds and thousands of cases in hospital practice which enables us to decide as to the comparative safety of these two agents employed for anæsthesia. Chloroform has been found, in a large collection of cases, to give one fatal result in about every twenty-five hundred cases in which it is administered, whereas ether has produced death only about once out of twenty-five thousand times of its administration. This percentage is so small that we feel justified in telling our patients that it is practically a perfectly safe agent.

Then, respecting the administration of ether to patients suffering from certain chest diseases. There are some forms of disease within the thoracic cavity, as in cases in which the left pleura is filled with fluid and the heart is crowded out of its normal place, in which obviously it would be very dangerous to give anything which quickens or alters the rhythm of the respiration or heart-action. But, in all ordinary cases of phthisis and heart-disease where an operation of any severity is demanded, we feel quite safe in the administration of ether. You may find that persons suffering from phthisis, or from cardiac disease, and also those who are perfectly healthy, will sometimes show signs of slight bronchitis twenty-four or forty-eight hours after the administration of ether, the cough being apparently due to the irritating effect of the ether upon the bronchial tract, or to the congestion which occasionally attends an incau-

For you know that during the administration of ether, when the patient becomes profoundly anæsthetized, the tongue is liable to fall back and occlude the entrance to the larynx. In the New York Hospital, the person who administers the ether is usually provided with a small pair of forceps, permanently attached to the operating-table by a long, slender chain, with which to seize the tongue under such circumstances and draw it forward. Esmarch's forceps are the best for this purpose, as they are strong and lozengeshaped at the end, in order to force open the jaws. But you will not always be able to seize the tongue, and then you may resort to the expedient, which we borrow from the Germans, of putting the finger behind the angle of the jaw and throwing the chin forward, thus putting the genio-hyoid muscles on the stretch and lifting the tongue. Again, we sometimes accomplish the purpose by throwing the head extremely backward. But sometimes, in spite of all precautions, such a degree of congestion will ensue as to give rise to a bronchitis which may continue for several days.

There is another precaution which you should always take when about to administer ether, and that is to see that the patient has no removable false teeth within the mouth, for they are liable to become loosened during the patient's insensibility and either be swallowed or, worse still, enter the air-passages. You may find occasionally some old maid, more sensitive than wise, who will deny having false teeth, and during the operation perhaps risk her life by a tooth going into the larynx. So always satisfy yourself on this point by either inquiring beforehand or by personal inspection in the early stage of the etherization.

Another point, with which most of you are probably acquainted, is one to which attention was called by Dr. Packard, of Philadelphia. I refer to the early or primary anæsthesia produced by ether, and, with less regularity, by chloroform. After the patient has taken a few inspirations of the anæsthetic, with the hand voluntarily uplifted, there is a momentary stage when the hand drops, at which sensibility disappears. This stage lasts only long enough to admit of opening an abscess, setting a fracture, or reducing a simple dislocation,—a short time, say not more than one or

two minutes, -and, if you do not take advantage of it immediately, you will have to continue the anæsthetic until its full effect is produced. We all hope to live to see insensibility to pain produced without loss of consciousness. Occasionally we encounter such instances under our present anæsthetics. I was once about to perform an operation upon a physician, who told me that he would make a certain motion when this stage was reached under nitrous oxide, and that I should then cut. He made the motion, but I did not cut. then made the motion again, much more vigorously, and I cut, making quite an extensive incision. He told me afterwards that it caused no pain whatever.

I will not attempt to discuss the different kinds of anæsthetics which have been recommended for use in surgery, but will merely mention the dichloride of ethydene, the bichloride of methylene, and the bromide of ethyl. All of these agents have been found to be dangerous. I was captivated by the bromide of ethyl at first, and performed several important operations while the patients were under its influence. But some symptoms appeared which excited my fears, and I quit its use. And, finally, a death taking place on the operating-table of Dr. Levis, who introduced the agent as an anæsthetic, shook the confidence of the profession and caused its disuse.

Let us return to our young lad with the tumor of the hand. He comes very slowly under the influence of the ether administered by the rectum. He has now taken it without any discomfort or abdominal tension for ten minutes. He is drowsy and breathing heavily, yet is not insensible enough to bear an incision. It is probable that this is due in part to the fact that the ether which the druggist gave our messenger was the ordinary commercial ether, and not Squibb's, which I generally use. I have sent for some of the latter, and you notice at once how freely the ebullition occurs,-much more rapidly than from the ether first used. We find that it has a more rapid and marked influence: the breathing is becoming more stertorous.

[At the end of ten minutes following the use of Squibb's ether, during which its administration was interrupted by the patient's strong desire to defecate, the administration of the ether by the rectum was abandoned, and anæsthesia completed rapidly by the use of the ordinary cone, and the tumor rapidly removed from the palm at the base of the right index finger. Rectal anæsthesia would have probably succeeded, but Dr. Weir was anxious to perform a hare-lip operation under its use before the expiration of the clinic hour.]

### CASE II.-HARE-LIP.

The effect of the pure ether administered by the rectum in the case of this little child, aged eight months, upon whom we are operating for simple hare-lip, is all that could be desired. I was able to proceed with the operation within three minutes after beginning etherization. The little one has defecated, but that has not interrupted the administration of the vapor. There has been no muscular stage in either of the two patients during rectal administration. The boy struggled some, however, when the cone was applied.

It was noticed in each of the cases that by increasing the temperature of the water to too high a degree, evaporization of the ether takes place faster than it can be absorbed by the rectal mucous membrane, and gives rise to intestinal distention. This was easily obviated by allowing the surplus vapor to escape from the pinched anus, and also by lifting the bottle containing the ether from the basin of hot water in which it rested. [It has since been stated that this patient died the next day, with signs of congestion of the bowels, and bloody discharges.]

## ORIGINAL COMMUNICATIONS.

## THE TREATMENT OF DIPHTHERIA BY ALCOHOL.

BY S. J. RADCLIFFE, M.D., Washington, D.C.

A CONTRIBUTION to the therapeutics of diphtheria is perhaps always admissible. A few words, therefore, on its treatment by alcohol, with an appended typical case, may need no apology. It is a subject of absorbing interest at all times, and if any course of treatment can be pointed out that will tend to limit its force or lessen its mortality, it ought to be well received and rightly appreciated. It is not claimed that there is anything new in the employment of alcoholic stimulants in

such cases, but the point which it is especially desirable to notice is that they should be given in full doses and without stint, as it will be found that they produce, in this condition, no stupefaction and no injurious effect on the cerebro-spinal system, even in little children.

I have no doubt of the value of this agent, and while there are so many and diversified lines of treatment employed to combat this fearful malady, most of them entirely empirical, and some, no doubt, decidedly irrational and based on no certain grounds, it is well to keep this one in view, for the purpose of having something to fall back on in case of doubt, failure, or disappointment in other therapeutic means.

There cannot be the shadow of a doubt that many cases succumb in spite of all treatment by reason of the rapid deterioration of the general system from bloodpoison, and the failure of the heart and nervous centres in maintaining a proper equilibrium, by keeping up the circulation in order to furnish adequate nutrition to the body at large. It must be admitted that the first three or four days generally decide its termination, either favorable or fatal, either for better or worse. If these are passed with appreciable change for the better, or remain at least in a passive condition, and we feel we have the disease well in hand, all goes on well; if not, if we are conscious that everything is uncertain, that every hour brings a worse phase of the trouble, and treatment is continued only at hap-hazard and without the least efficiency whatever, we may be sure there can be but one termination, and that isdeath.

It is my opinion, therefore, that alcohol must play an important part in the
treatment of diphtheria and scarlet fever,
as it has always in that of all adynamic
and zymotic diseases. The report of almost all successfully-treated cases of diphtheria has plainly shown that to this agent
were due mainly, or in a prominent degree,
the favorable results obtained. Whether
we view its operation on the economy
simply as a cardiac stimulant or tonic, or
as a germ-destroyer or disinfectant, as is
maintained, it may be considered an allsufficient combatant, and we can afford to
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#### CASE II .- HARE-LIP.

The effect of the pure ether administered by the rectum in the case of this little child, aged eight months, upon whom we are operating for simple hare-lip, is all that could be desired. I was able to proceed with the operation within three minutes after beginning etherization. The little one has defecated, but that has not interrupted the administration of the vapor. There has been no muscular stage in either of the two patients during rectal administration. The boy struggled some, however, when the cone was applied.

It was noticed in each of the cases that by increasing the temperature of the water to too high a degree, evaporization of the ether takes place faster than it can be absorbed by the rectal mucous membrane, and gives rise to intestinal distention. This was easily obviated by allowing the surplus vapor to escape from the pinched anus, and also by lifting the bottle containing the ether from the basin of hot water in which it rested. [It has since been stated that this patient died the next day, with signs of congestion of the bowels, and bloody discharges.]

## ORIGINAL COMMUNICATIONS.

THE TREATMENT OF DIPHTHERIA BY ALCOHOL.

BY S. J. RADCLIFFE, M.D., Washington, D.C.

A CONTRIBUTION to the therapeutics of diphtheria is perhaps always admissible. A few words, therefore, on its treatment by alcohol, with an appended typical case, may need no apology. It is a subject of absorbing interest at all times, and if any course of treatment can be pointed out that will tend to limit its force or lessen its mortality, it ought to be well received and rightly appreciated. It is not claimed that there is anything new in the employment of alcoholic stimulants in

such cases, but the point which it is especially desirable to notice is that they should be given in full doses and without stint, as it will be found that they produce, in this condition, no stupefaction and no injurious effect on the cerebro-spinal system, even in little children.

I have no doubt of the value of this agent, and while there are so many and diversified lines of treatment employed to combat this fearful malady, most of them entirely empirical, and some, no doubt, decidedly irrational and based on no certain grounds, it is well to keep this one in view, for the purpose of having something to fall back on in case of doubt, failure, or disappointment in other therapeutic means.

There cannot be the shadow of a doubt that many cases succumb in spite of all treatment by reason of the rapid deterioration of the general system from bloodpoison, and the failure of the heart and nervous centres in maintaining a proper equilibrium, by keeping up the circulation in order to furnish adequate nutrition to the body at large. It must be admitted that the first three or four days generally decide its termination, either favorable or fatal, either for better or worse. If these are passed with appreciable change for the better, or remain at least in a passive condition, and we feel we have the disease well in hand, all goes on well; if not, if we are conscious that everything is uncertain, that every hour brings a worse phase of the trouble, and treatment is continued only at hap-hazard and without the least efficiency whatever, we may be sure there can be but one termination, and that isdeath.

It is my opinion, therefore, that alcohol must play an important part in the treatment of diphtheria and scarlet fever, as it has always in that of all adynamic and zymotic diseases. The report of almost all successfully-treated cases of diphtheria has plainly shown that to this agent were due mainly, or in a prominent degree, the favorable results obtained. Whether we view its operation on the economy simply as a cardiac stimulant or tonic, or as a germ-destroyer or disinfectant, as is maintained, it may be considered an allsufficient combatant, and we can afford to ignore even other physiological actions of this agent, most of which are unknown and rest still in a mist of uncertainty, and be

satisfied that such action is adequate to meet the demands and produce the result most desirable in each case.

If, as has been confidently asserted,

a part of the alcohol taken internally is broken up and deposited in the tissues as a hydro-carbon for use in the economy, and a part eliminated by the kidneys as alcohol, a part also being exhaled by the lungs, a certain portion only being available in the system, it is evident it must have been absorbed into the circulation to do so; and, as the systemic circulation contains de facto the materies morbi of the disease,—whether in the serum as distinct organisms or bacterial formations, or in combination with the plastic material of the blood or corpuscles,—why may it not be a rational sequence that alcohol acts first locally, as a germicide and disinfectant, both on the fluids and on the exhalations from the lungs; second, as a cardiac tonic, in an indirect way, through the nervous centres; and third, as a food, supplying pabulum for exhausted energies, maintaining the tissues in a healthy state, or preventing disintegration or waste, or harboring of stored-up resources? Flint says the production of animal heat, which is supposed by some to be due entirely to the action of non-nitrogenized substances (hydrocarbons), is closely connected with the function of nutrition.

Dr. Sternberg says, in his article on the "Germicide Value of Therapeutic Agents," in the American Journal of the Medical Sciences for April, 1883, p. 321 et seq., under the head of "Alcohol," "The value of alcohol as a germicide is so slight that its favorable action in supposed germdiseases requires some other explanation than that which assumes that it may destroy parasitic micro-organisms in the circulation." But, he continues, "it is, of course, quite possible that other pathogenic organisms are more susceptible to the influence of this and of other reagents than are the test-organisms which have been selected for these experiments. This is, indeed, rendered probable by the very marked difference shown in the vital resistance of Bacterium termo and of the septic micrococcus to the reagent in question.

"The first-named organism in a fresh culture was not killed by immersion in ninety-five per cent. alcohol for two hours; and the vitality of the same organism in may be conducted towards them, we will

'broken-down' beef-tea, old stock, containing reproductive spores, was preserved after forty-eight hours' immersion in ninety-five per cent. alcohol, while the septic micrococcus was not able to resist the same agent in the proportion of twenty-

four per cent.'

The organisms selected for his experiments were—a, a micrococcus from gonorrhœal pus; b, a micrococcus from pus obtained from an acute abscess-whitlow; c, a pathogenic micrococcus from the blood of a septicæmic rabbit; d, Bacterium termo and other bacterial organisms-micrococci and bacilli-from "broken-down" beeftea which had been freely exposed to the

There is, of course, a vast difference between an artificially-selected and productive organism and one developed in the way nature points out, and these artificially-selected organisms cannot be compared with, and must not be confounded with, the particular organisms peculiar to, and a part of, all "germ diseases," such as

diphtheria.

It is, therefore, very well for Dr. Sternberg to put in by way of parenthesis, showing how candid and free from bias he is to any particular theory, that its favorable action in supposed germ-diseases in destroying parasitic micro-organisms in the circulation requires some other explanation than its assumed value, and that it is, of course, quite possible that other pathogenic organisms are more susceptible to the influence of this reagent than the test-organisms selected for experiment. What are these other pathogenic organisms more susceptible to the influence of this reagent? That is exactly the question at issue: What are they? Until we decide the "What are they?"—the diphtheritic bacilli, if you choose, -we cannot pretend that the value of alcohol as a germicide is so slight that its favorable action requires some other explanation than that which assumes that it destroys parasitic micro-organisms by its mere contact within the body or in the circulation. No doubt there are certain conditions of the body, either physiological, chemical, or mechanical, local or general, as yet not described or not within our knowledge or comprehension, which, however near we may come to them by experimental research, will ever still be beyond our grasp, and however well our approaches still find that the object we search after is a little beyond. We cannot penetrate the unknown, and no laboratory arrangements of ours can compete with those set up by nature. We can only judge by results in many, I might say most, of the operations we employ having in view the cure or mitigation of disease. Experience, really, is our guide, and this is gained by empiricism. Chemical affinities, solutions and solids, agents and reagents, analysis and synthesis, we are acquainted with out of the body, but when we come to apply these principles and actions to the vital parts within the body, we find there is but little similitude, and we wonder why, and forget that the two are manipulated by different hands. This is the reason we are so often disappointed in our work and are so apt to attribute our successes or our failures to the wrong source. We often lay claim to and solace ourselves with the idea that we have accomplished a great thing, when, probed a little deeper, the great achievement proves to be a mere fallacy.

Prof. Dujardin-Beaumetz, on the treatment of pneumonia (Boston Medical and Surgical Journal, vol. cvii. pp. 481-2), says, "For quite a number of years I have been engaged with some perseverance in the study of the action of alcohol on the economy, and, although I have not yet attained a complete solution of this physiological problem, I believe, nevertheless, that we are warranted to-day in affirming that alcohol acts in three ways, -as a food, as a medicine restoring waste, and as a tonic. Let us examine each of these properties. Alcohol acts as a food. Here is one of the points the most disputed in the physiological action of this substance. You are well aware that there are two decisive opinions as to this action: one party maintains that the larger part of the alcohol ingested is burned in the economy; this is the opinion defended by Liebig, Bouchardat, and Sandras. The other party, represented by Perrin, Lallemand, and Duroy, claims, on the contrary, that alcohol undergoes no modification in our

"In support of each of these opinions chemical arguments have been adduced, and physiological arguments. I have no room in this lecture on pneumonia to enumerate them in their entirety, but what I can affirm, and that because I have studied the subject under all three of the

aspects, is that it is impossible to furnish a direct experimental solution of the problem.

"We, indeed, find alcohol unchanged in the tissues and in the excretions. The analysis which we recently made in our hospital service of the viscera of a man who, after killing his two sons, committed suicide by swallowing a quart of raw brandy, revealed the presence of the brandy in notable proportion in the brain, spinal cord, kidneys, liver, and lungs. But the quantity which we found, did it equal that which had been ingested? Here lies

the whole question.

"To-day, thanks to the experiments of my excellent interne in pharmacy, Jaillet, we are in a position to affirm that alcohol does undergo transformation in the economy. Jaillet has, in fact, demonstrated that in presence of hæmoglobin and oxygen, alcohol is transformed into aldehyde, then into acetic acid. This reaction which takes place in the apparatus of our laboratory ought also to take place when alcohol is introduced into the economy and passes into the blood. Alcohol is then a food, and we can qualify this statement by saying that it acts as food by giving force and restraining waste. In order to undergo its successive transformations in the system, alcohol takes its oxygen from the blood, and, in particular, from the oxy-hæmoglobin, and, if the dose is too large, it stops hæmatosis, and the individual dies asphyxiated. In fine, alcohol acts unchanged upon the cerebro-spinal centres and determines these phenomena of excitation and tonicity; and it is in this way that we explain its tonic and stimulant action. From these conclusions it is easily understood how alcohol comes to be of service in the treatment of pneumonia. It supports the vital forces, braces up the tissues, and, instead of augmenting the temperature, lowers it."

The London Medical Times and Gazette (vol. i., 1878, p. 147) says, "Prof. Binz, with the assistance of Herrn H. Henbach and A. Schmidt (Archiv f. Exper. Pathologie, vi. 287), has lately re-examined this question, 'The Excretion of Alcohol by the Kidneys and Lungs,' using Geissler's vaporimeter for the detection of small quantities of alcohol in the urine, instead of the ordinary chromic acid and iodine reaction, and the same method for the pulmonary vapor, the latter being previously

condensed by passing the breath through a series of Wolff's bottles containing cold distilled water, or through a Liebig's condenser. With the vaporimeter as little as 0.05 per cent. of alcohol could be detected, though certain precautions, fully described in the original, are necessary for its accurate use. Admitting all possible errors, experiments on the urine of six patients with various febrile affections (erysipelas, pneumonia, phthisis, etc.) showed that during a period of eight or nine hours after a dose of alcohol had been taken, not more than 3.1 per cent., or, at the highest computation, 6 per cent., escaped by the kidneys, while in some determinations no alcohol at all could be discovered in the urine. In regard to excretion by the lungs, it was found if from thirty to sixty cubic centimetres of pure alcohol were drunk, diluted with syrup, and the patient's breath were condensed continuously for one or two hours, and the product examined either immediately after the ingestion of the alcohol or at any time within six hours, not a trace of the alcohol could be found in it. Even assuming that the alcohol ingested required fifteen hours for the whole of it to evaporate by the lungs, the vaporimeter method was delicate enough to detect the fraction of it which would have escaped during the progress of the experiment. The idea that alcohol is present in the breath after wine or spirits have been drunk, depends on the odor imparted by the presence of various ethers, fusel oil, etc., and not alcohol. A quantity of pure, diluted alcohol equal in volume to half a bottle of champagne may be drunk without tainting the breath in the least; and alcohol may be subcutaneously injected with the same result, though it is immediately detected if a little fusel oil be added to it first. Reasoning from analogy, Prof. Binz and his assistants regard it as impossible that the skin should eliminate alcohol, if the lungs, which are so much better constructed for excreting it, do not do so.

"They conclude, therefore, that by far the larger part of any ingested alcohol is disposed of within the organism, in the presence of tissue-change; and, if we remember rightly, this is the conclusion to which the late Dr. Anstie was also led by his own experiments."

These long quotations are deserving of notice, and seem to be decisive as to the

value of alcohol as a food, and its relation to tissue-changes; and its action as a germicide may be inferred when we consider its approximation or close relation to all the tissues of the body, normal and diseased.

- The subject is still, however, unsettled, and remains sub judice, notwithstanding the amount of attention given it by those foremost in the ranks of investigators in all countries; and we will only have to wait time's development to demonstrate the certainties we are in search of. A great many problems in medicine are still unsolved, but it is not for want of industrious working and striving in the right direction that it is so. But the elements of success will depend not so much on the amount of work as on the right appreciation of the questions involved, and the manner in which it is performed. Theories and hypotheses will amount to nothing so long as they cannot be practically applied. The most practical and useful discoveries have been made as if by accident, after reasoning was at fault and deductions had failed to compute the sum total of the work in view. We now reason. in a great measure from analogy, and hope to find in one thing what we imagined we found in another, but we are often mistaken, and no doubt many will be disappointed, or think so, who attempt to treat all cases of diphtheria with alcohol because the following case was cured apparently by that agent.

The case is important in many points, and shows a line of treatment worthy of

consideration and imitation:

September 1, I was called to visit M. L., a little girl, 4½ years of age. Three days before, she was a little feverish, had some sore throat and cough, and her mother thought she was suffering from merely an ordinary cold, and paid but little attention to it, even permitting her to go out-doors in that condition. The malaise continued, however, and the child became quite drooping, and could no longer be kept on her feet. High fever set in, with difficult deglutition and hurried breathing and a hoarse cough.

When I saw her, her face was highly flushed, eyes bright and staring, pulse 140, temperature 104.2°, respiration 40. On examining her throat, I found the tonsils and half-arches highly inflamed, and there were several deposits of grayish pultaceous diphtheritic membrane on each tonsil, on the

uvula, and on the pharynx.

I painted the parts generally with muri-

ated tincture of iron, and gave her the same remedy internally, combined with chlorate of potassium, and also ordered a diaphoretic mixture of solution of ammonium acetate and spirits of nitric ether, the two to be alternated every hour.

2d, A.M. - Points or patches of deposit had coalesced on the tonsils and pharynx, forming a broad sheet of membrane, nearly covering the tonsils and extending downwards from the pharynx towards the larynx. Her pulse was 144, temperature 104.5°, respiration 46. Treatment continued, with two grains of quinine thrice daily.

P.M.-About the same.

3d, A.M.—But little attempt at coughing,when attempted, hoarse and muffled; breathing more difficult, and countenance more anxious. Temperature 103.6°, pulse 140, respiration 40, as near as can be taken, the rest-lessness of the patient making it difficult to do so. Treatment continued, with spray of lime-water to throat every hour.

P.M.—Symptoms more aggravated, but de-

tails about the same.

4th, A.M.—Swallowing more difficult, frequent hoarse cough, color fading from cheeks, eyes becoming more hollow, face looks puffed, surface cooler, membrane darker and partly peeling off, and can be removed with brush in spots, leaving raw surface beneath. perature approximately 103°, pulse 146, respiration 42. The prostration being so imminent, and the general symptoms becoming so urgent, the treatment changed to four grains sulpho-carbolate of sodium in glycerin and syrup every two hours, a teaspoonful of brandy every three hours or less, or to four ounces daily, and the spray of lime-water to the throat every hour continued. She rejects all food, but takes occasionally a little

P.M.—No material change.

5th, A.M.—Face pale and swelled, anxious and pitiful look, eyes sunken, respiration more oppressed, pulse quick, compressible, and has empty feel; very restless, and hard to administer remedies or examine; sleeps but little. Ordered to be given at once five grains sulphate of zinc every five minutes until vomiting is produced. After third powder, vomited portions of membrane, some shaped like pieces of boiled macaroni. Breathing somewhat relieved, and child disposed to sleep; cannot lie down, but rests in mother's arms. Treatment to be continued, brandy pushed to its utmost limit.

P.M.—Child somewhat easier through the day, but still in very critical condition. Or-

dered zinc-powders to be given during night if necessary.

6th, A.M.—Patient relieved for some hours yesterday after taking the zinc-powders, but now the dyspnœa quite as great, or greater. Breathing abdominal, almost total collapse of lungs. Administered five-grain powders | sidering whether, in the absence of all

of sulphate of zinc every ten minutes. Emesis produced after third powder, with dislodgment of more membrane. Brandy continued more frequently, to six ounces daily. Spray and sulpho-carbolate of sodium continued the same, with all the nourishment she will take.

P.M.—Prostration marked; general symp-

toms not improved.

7th, A.M.-Child somewhat better. Membrane has disappeared from throat, as far as can be seen. Respiration easier, pulse-tem-perature ratio not so high, skin has morewarmth, can sleep some at short intervals in mother's arms, takes milk, beef-extract, and medicines more willingly.

P.M.—General condition better; shows it

by her appearance and actions.

8th, A.M.-Still some improvement in respiration, pulse, and temperature. On auscultating chest, find more air enters lungs, with some expansion of chest-walls. smothered and hoarse.

P.M.—Condition more satisfactory.

oth, A.M.—Some return of dyspnæa, respiration more hurried. Gave five-grain sulphate of zinc powders again, but nothing appeared in the vomit like "false membrane;" but it relieved the oppressed respiration. Ordered brandy continued ad libitum, without restriction, to six or eight ounces, if possible, daily.

P.M.—Patient more comfortable, and a little

better in every respect.

10th, A.M.—Patient improved, breathes better, slept more during the night. Has become very fond of the brandy, and motions for it. Cannot articulate; can only cry hoarsely with an effort. Has not been able to articulate from the first.

P.M.—Condition better.

11th, A.M.—Respiration freer and slower, pulse and temperature much reduced, asthe-

nia marked, but patient doing well.

a marked, but patients. Ordered P.M.—Patient still improving. Ordered unabated. Other medibrandy continued unabated. Other medicines discontinued, but the sulpho-carbolate of sodium to be given at longer intervals. Has taken about forty ounces of brandy in eight days without intoxication or any stupefying effect, and she prefers it to all her medicines

12th, A.M.-Improvement continues, and the way looks hopeful. No dyspnœa. Canlie on the bed without difficulty or oppression.

16th,—Convalescence has progressed up to this date, and visits discontinued.

The child had partial paralysis of the vocal organs following her attack of illness, and for two or three months could only speak in a deep, coarse, guttural voice. This condition has now passed away.

It seems to me, then, reviewing what has been said, that it is worth while conother remedies, diphtheria could not be successfully treated with alcoholic stimulants alone. The correctness of this proposition appears to be verified by the above case, especially in view of the sudden deaths occurring during convalescence. I would myself, I think, prefer to rely upon such treatment if I were confined to one remedy. Brandy is preferable to whiskey, as being more palatable to children.

1211 F STREET.

INJECTIONS OF CORROSIVE SUB-LIMATE SOLUTIONS INTO THE INGUINAL GLANDS AND INTO THE SPLEEN IN SYPHILIS.

BY HUGO ENGEL, M.D.

SUBCUTANEOUS injections of iodine, ergot, and the like have been made as frequently for the purpose of reducing hypertrophied glandular organs, as those of corrosive sublimate with the view of curing constitutional syphilis. Ergot has been employed in a similar manner, not only to diminish the enlargement of the spleen, but also to improve in general leucæmic conditions. While assistant at the clinic of Prof. Da Costa, I made a number of hypodermic injections of the fluid extract of ergot in a case of leucocythæmia. Though the disease was a wellpronounced, almost typical case of the splenic variety of this malady, and though the spleen was more than triple its normal size, leucæmic cachexia nevertheless had not yet developed itself. Six drops of the fluid extract of ergot were daily injected into the skin of the patient immediately over the splenic tumor. The internal treatment consisted of iron. The result was very favorable. Prof. Da Costa had demonstrated the case as a typical one to the class. About two months later the great teacher was able to show publicly the same individual-cured. Many similar cases have been since reported.

Prof. Mosler,\* however, was the first to make injections of Fowler's solution directly into the substance of an enlarged spleen. His three cases induced him to draw these conclusions: that such injections are well borne even in large doses; that the effect of the remedy, if employed in the manner indicated, is far more in-

tense and more certain, but that this mode of procedure should not be made use of in soft splenic tumors, nor in cases where the cachexia already is so pronounced as to have caused a hemorrhagic tendency; and that in leucocythæmia this treatment was dangerous. His own cases were chronic tumors of the spleen, due to malaria. A fourth case† ended fatally. After the sixteenth injection of Fowler's solution, peritonitis sprang up, and the patient died.

Kussmaul‡ made a parenchymatous injection of sclerotic acid into a leucæmic tumor of the spleen. Only one decigram of the acid was injected, but the patient soon afterwards died. He had been suffering from an advanced stage of the disease, and his death was not due to any poisonous influence of the drug, but to the fact of the injection entering directly into the circulation, the tumor having been of the

soft variety. Peipers mentions the conditions which Mosler considers essential for the successful and innocuous injections into the parenchyma of the spleen. The organ must be of dense, solid consistence, and almost touch the abdominal wall; it should at least lie as near to it as possible. Then the patient must have no tendency to a hemorrhagic diathesis, and not be in the state of leucæmic cachexia. Of the utmost necessity is the preparation of the system and of the organ for these injections. The patient has previously to be subjected to a prolonged internal treatment with remedies by the action of which upon the contractile elements of the spleen the quantity of blood in the organ is Lastly, for several hours diminished. preceding and following the operation, the external application of ice-bags to the spleen is necessary. In the three cases quoted above, of Mosler, all these precautions had been attended to.

Notwithstanding Mosler's warning, Peiper || tried the same treatment—injections of Fowler's solution into the parenchyma of the spleen—in a case of leucocythæmia. The result was exceedingly favorable and very prompt. But Peiper

<sup>\*</sup> Deutsche Med. Wochenschrift, 1880, No. 47.

<sup>†</sup> Deutsches Archiv f. Klin. Med., vol. xxviii. † Jaeger, Ueber Punction der Milz, etc., Inaug. Dissert., Strassburg, 1880. Referred to by Dr. Peiper, Ueber parenchymatose injectionen von Fowler's Solution in einen leukaemischen Milz-Tumor, Deutsches Archiv f. Klin. Med., xxxiv.

p. 353. Ø Dissert., loc. cit., Peiper. Deutsches Arch. f. Klin. Med., p. 352 et seq.

also insists upon the same conditions that Mosler found essential.

Lewin, as is well known, was the first to suggest and practise hypodermic injections of corrosive sublimate in constitutional syphilis. He recommended the regions of the glutæi muscles as the most suitable locality. Many cases have been since reported, in which this treatment proved rapid, reliable, and effective, though the local irritation has often given rise to complaints. I have also made use of the same method, but must confess that the internal administration of mild mercurial preparations, with gradually-increasing doses, until salivation is fully developed, or the inunction cure, carried to the same issue, and each of these treatments followed by iodide of potassium, has met with a far greater success in my hands than Lewin's method.

The following accident gave me the opportunity to try a new treatment. May 12, 1882, five young men together came into my office. They had each contracted the primary sore from one and the same woman. I will name them A, B, C, D, E. In A a small vesicle was noted on the third day; B and C observed an erosion of the skin the fifth day; D, on the morning of the sixth day; and E, the most careful of them all, first detected a small ulcer near the prepuce on the ninth day. He at once visited his friends, and in the evening of the same day the five entered my office. Every one had one single sore, evincing induration. All five were young men, varying from 19 to 23 years. All were free from organic disease and otherwise perfectly healthy, almost robust. D and E were brothers, C a distant relation, and A and B simply friends of theirs.

Here was an opportunity for comparison of different forms of treatment. Explaining to them that constitutional differences and those in the time of the appearance of the primary sore necessitated a different remedial procedure in each, I treated them as follows. In A, B, C, and D I cauterized the sore with nitric acid, then applied for a few days lead-water, and afterwards kept the wound dressed with iodoform. In E I removed the indurated part with scissors, and then used iodoform. In none did I employ any internal treatment, save in A, to whom I gave calomel, guarded by opium, in gradually-increasing doses, and B, whom I put under what I shall

call, for the sake of convenience, the preventive treatment, which I shall describe later. C had a bubo five weeks after the initial sore, D on the sixteenth day, and E on the twenty-seventh day; while in A and B a very small bubo developed itself, in B at the end of the fourth, and in A in the middle of the fifth week. I now employed the preventive treatment in D, making the injections directly into the swollen inguinal gland.

To bring the conclusions which I have drawn from these observations into closer connection with the data from which they have been derived, I will here mention what these facts seem to indicate.

That the excision of the primary sore, including the whole indurated part, is of no influence whatever on the further progress of the case. A long experience has taught me that even the cauterization of the primary sore, for this end, probably also is superfluous.

That, whether the patient is put under an anti-syphilitic treatment while the healing of the primary sore is progressing, or not, the fact has very little, if any, influence on the swelling of the inguinal gland; i.e., if the sore would have been followed by a bubo without treatment, no treatment will prevent its appearance; but, if thus treated, the glandular inflammation will be less intense, the gland will swell If we accept the theory of the pathologists, who teach that the swelling of the gland in these cases is not due to sympathetic inflammation, but to accumulation of the infectious material, we may explain the fact mentioned by claiming that in the two cases A and B the antisyphilitic treatment had in so far diminished the virulence of the poison as the irritation of the gland was less severe.

Varying in time from five weeks up to seventeen weeks, all the cases showed evidences of constitutional affection save D's, in whom, up to this time, no secondary or any other symptom of lues has as yet been observed. In A and B the symptoms were very moderate,—the former suffering from a very mild form of psoriasis palmaris, and the latter from an angina syphilitica, not in the least severe. C and E had roseola, which, in E, was followed by a syphilitic eczema-eruption all over the body, and almost synchronously by violent angina coupled with ulceration of the right velum. I put A, B, and E through

an inunction cure, followed by iodide of potassium, as described by me in a former article in this journal.\* They also have since had no symptom of lues. In C's case I made use of the preventive treatment, injecting the remedy into the parenchyma of the spleen. The treatment was commenced the third day after the appearance of the roseola, the latter having lasted but two days. Thus far, up till to-day, no further constitutional disturbance has been evinced in C's case.

From these data I conclude—and I will add that my experience in general leads me to the same result—that a thorough anti-syphilitic treatment, instituted during the progress of the primary, indurated sore, while not preventing the constitutional affection, probably not even postponing it, has a subduing influence on the whole future course of the lues: the symptoms are decidedly milder and more amenable to treatment.

That the preventive treatment, if applied to the bubo, and ere other constitutional symptoms have appeared, seems to eradicate the disease; and

That, if the same treatment be made use of, either at the time of roseola or at any time preceding the constitutional symptoms, and is applied to the spleen, it seems to extinguish the poison of syphilis and to prevent further constitutional affection.

Lastly, from an experience extending over a period of over twenty years, and owing to accidental circumstances specially considerable in luetic maladies, I am convinced that syphilis can be eradicated.

In a future article I shall endeavor to adduce the proofs for this my assertion. Suffice it to-day to say that three months ago I had for the first time the opportunity of watching the effect of anti-syphilitic treatment in the third generation. When yet a student, twenty-one years ago, I had a patient under my charge in Berlin, whom I treated according to the principles laid down in the article above quoted.† Two years later I met the man here in our city, when he asked my opinion about his marrying. I advised him to continue taking the iodide of potassium twice a year, but told him that he might marry, which he did. A year later I delivered his wife of a healthy daughter, whom I attended for pertussis, varicella,

morbilli, and croup, once also for tonsillitis acuta, and once for a neuralgia caused by a decayed tooth. Three months ago I delivered her of a male child, which, up to this time, does not show the least trace of hereditary lues. In a second case, still more interesting, and to be reported by me at some future time, an individual cured of constitutional lues for the second time (seven years after the first) contracted a hard chancre, and this was again followed by systemic affection. I showed this probably unique case to a number of friends.

Regarding the preventive treatment: this consists in the injection of a solution of corrosive sublimate, first into the enlarged inguinal gland, when this succeeds an indurated primary sore,—it may probably, also, be wise to do so after the multiple ulcer,-and at a later stage into the parenchyma of the spleen. Whether it will always be possible to make such injections into this organ, I do not know. That the spleen is enlarged in lues, my experience has sufficiently proved to me. Sometimes this hypertrophy is considerable, without speaking of those fatal cases in which we find gummata in the liver, spleen, and other organs, and in which the spleen is sometimes greatly augmented in size. In my patient this organ was rather large, and the abdominal walls were not thick. I made him lie on his left side, and about an inch below the ribs, where I could palpate the dense organ, close to the skin, I pushed in my needle, nearly two inches Twenty-one such injections were long. made. They were followed by very little reaction. Once the patient had a chill, a few minutes after the injection, and some fever ensued; another time he felt sick at the stomach; but these were all the untoward symptoms noted. The local reaction was very moderate.

The injections into the bubo were made with a small and very thin needle, but, notwithstanding its sharp point, the patient complained of the pain. These glands are, in the beginning, very hard and dense. The fluid itself always caused a little, and sometimes even severe, pain, lasting nearly half an hour. Should later experiments prove that these injections into the bubo are invariably followed by such good results as those noted in D, I shall always employ them in preference to those into the spleen,—i.e., if I see the case early enough; and I shall even later

<sup>\*</sup> Philadelphia Medical Times, December 22, 1877, p. 121.

do so if there be still observed enlarge-

ment of an inguinal gland. The syphilitic poison is probably absorbed only by the lymphatic system, and thence is carried into the circulation. It is possible that while the poison in the mucous membrane easily causes erosion and then ulceration, arrived in a gland, like the inguinal, it perhaps does not proceed further until the pathogenetic substance —be it a bacillus or anything else—has reached a certain grade of development, when it is carried away into the circulation. If we can succeed in destroying the poison anywhere, the bubo would be the place to attack it. It then is not yet in the system, and we have an easy access to it. If it be too late, if the poison have entered the circulation, then I would advise a further trial with injections into the parenchyma of the spleen, though I see all the difficulties in the way, which in my case were very small. Should the spleen be but moderately enlarged, and should a great amount of adipose tissue intervene between the abdominal covering and the spleen, such injections, if not impossible, become impracticable. For, even granted that we have a needle long enough to reach the organ, how are we to be positive that the needle really enters the spleen? Still, there is one consolation: a solution of corrosive sublimate will always be less dangerous than one of arsenite of potassium, the consequences of which Mosler dreads so much under certain circumstances. A solution of only one-sixteenth of a grain of the bichloride of mercury, if it contains no other obnoxious ingredients, will scarcely cause any danger should it even enter the peritoneal cavity or find its entrance into the bowel.

This leads me to another important When I made these injections I first placed my needle into a ten per cent. solution of carbolic acid, and then drew up into the syringe a like solution, filling with it the barrel of the instrument. Then washing it out with an aseptic solution of salicylic acid and cleansing with the strong carbolic acid fluid the skin at the place where the injection was to be made, everything was prepared for the injection of the corrosive sublimate. These precautions were perhaps superfluous when employing such a powerfully aseptic fluid as the solution of the bichloride, -at least superfluous with the inguinal gland; while | which a Hunterian chancre succeeded by

with injections into the spleen one can scarcely be sufficiently careful.

There is one question still to be decided, if it ever be possible to determine it. Did these injections of corrosive sublimate act as I have indicated, or did they simply exert the same effect that mercury always has in this disease? or, in other words, was there any advantage gained by making these injections into the parts specially selected, or would they have done the same amount of good if they had been instituted somewhere else,—in the glutæus

muscle, for instance?

In those cases where I succeeded in eradicating the lues to such an extent as to observe no relapse of any kind during a period of two years, I had gradually increased the dose of the preparation of hydrargyrum administered until typical salivation had commenced and continued for three to six days, when the treatment had been followed by a prolonged course of iodide of potassium, to which, for the sake of precaution, the patient had to resort twice a year after his discharge from my observation. But in those cases where I had employed the hypodermic injections of corrosive sublimate as a preventive, I had anxiously avoided salivation, and had ceased the treatment on the least indication of approaching inflammation of the gums, and had followed it by no aftertreatment. Besides, by no treatment had I been enabled thus far to prevent the normal course of constitutional affection from its onward march, no matter how much I might have influenced its degree of severity. But here in D's case the disease seemed arrested with the bubo, in C's case with the roseola. During the last fifteen years I have often employed some form of mercurial treatment up to full salivation, either during the healing of the primary sore, or immediately after its having healed, to influence the remaining induration and its possible consequences, but in those cases that I was able to follow up, I never succeeded in totally preventing further constitutional affection, though the symptoms were very mild.

Certainly, some cases never returned to me. Some among them may have never been troubled by any secondary symptoms and enjoyed the immunity of D and C. There have, besides, been cases reported— I, at least, think I have read of such—in a non-suppurating bubo nevertheless was not followed by constitutional lues. Whether there are on record any authenticated cases of such a kind, I am not prepared to say, but repeat that all cases of hard chancre, followed by a non-suppurating bubo, and continuing under my observation, had heretofore become the victims of secondary symptoms, no matter what their treatment during the progress of the primary sore.

In the light of all this, I think I am entitled to say that there is some reason why, in cases of enlargement of an inguinal gland, following an indurated primary sore, hypodermic injections of corrosive sublimate should be tried, and in cases where there has already been an indication of further constitutional affection, as roseola, and where no special accidental conditions (as above enumerated) contra-indicate their employment, the same solutions should be injected into the parenchyma of the spleen, and in both cases be continued until the first warning symptoms foreshadow the approaching mercurial stoma-

titis. I do not by any means wish to contend that I feel warranted in drawing definite conclusions from the two cases reported; still, in modern times, if one thinks he has made an observation which may tend to do some good and have some value, one has to be a little quick in making it known, or come too late. But the main reason inducing me to this early report consists in the twofold desire to see the treatment tried in a larger number of cases, and, should it possess the value it apparently promises, to have its benefit accrue to the immense number of unfortunates who are the victims of this baneful disease.

507 FRANKLIN STREET, PHILADELPHIA.

REVIEW OF THE PROGRESS OF MEDICAL AND SURGICAL ELEC-TRICITY.

BY WILLIAM R. D. BLACKWOOD, M.D., Electrician and Neurologist to the Presbyterian Hospital, Physician to St. Mary's Hospital, etc.

GALVANISM has been successfully used in destroying the Dracunculus, or Guinea-worm, a terrible African pest. The worms, if broken off in extracting them, produce great irritation and sloughing, death resulting not unfrequently; but several cases are reported in the *British* 

Medical Journal, in which, galvanism being applied during traction on the worm, it came away entire.

Cutaneous faradization is recommended by Rumpf in progressive locomotor ataxia where the initial symptom is atrophy of the optic nerve; but the writer has never had good effects from faradism in ataxia of any kind, so far as durable results are concerned.

Thompson, of Indianapolis, reports in The Archives of Ophthalmology, vol. xii. p. 183, an interesting case of cystic orbital tumor treated by electrolysis. The tumor protruded downward and outward from tendo oculi behind the upper eyelid, and the motion of the eye was very limited; vision, 29. A trocar and canula being introduced, 3iii of dark fluid were removed. The positive was connected with the canula, the negative applied over the temple of the same side, and a stabile current from a Stohrer of twenty cells passed for several minutes. Considerable inflammation occurred, and persisted for several days, but the cyst was destroyed, and in a month vision had risen to 38.

Neftel has returned to electrolysis in treating malignant tumors, destroying them at a single operation. A platinum anode is plunged perpendicularly into the tumor down to its presumed point of implantation, and from three to five cathodes placed on the periphery of the tumor. The current is then closed and rapidly carried to its greatest power (thirty to sixty elements). The position of the cathodes is changed about every five minutes, so as to cover every part of the The operation lasts about an tumor. hour. The tumor becomes livid, gray, and finally black. There is a very slight general and local reaction. In two or three days the part operated upon becomes cold, and, after some discharge, finally comes away en bloc; leaving a denuded surface, which is soon covered by healthy granulations. Neftel has also treated benign tumors by this method, though they do not require such energetic treatment as those of the malignant type. conclusions which he draws are:

1. Electrolysis is an antiseptic method, and as such may be combined with the ordinary methods of operation.

2. It is preferable to any other method in the treatment of malignant tumors.

3. Malignant tumors should be entirely

destroyed by the operation, and at a single séance. In benign tumors it is sufficient to establish a retrograde metamorphosis.—Virchow's Archiv.

## GALVANIZATION OF THE BRAIN, AND ITS VALUE IN THE TREATMENT OF CHOREA.

Charles L. Dana, M.D., details the effects of passing a galvanic current through the healthy human brain, the manner in which these effects are brought about, and gives the notes of eight cases of chorea, occurring in patients ranging in age from eight to fifteen years, treated more or less systematically by cerebral galvanization.

The average duration of the treatment was twenty-five days, of the symptoms thirty-four days, against six and eight weeks in thirty other cases, treated chiefly by arsenic. Dr. Dana, however, does not base his belief in the efficacy of electricity so much upon the statistics of duration as upon the fact—which occurred too frequently for mere coincidence—that evident improvement in the symptoms followed each séance, and continued for twenty-four or thirty-six hours.

What is claimed for "anodal galvanization" is that it is a most valuable adjunct in the treatment of chorea; that, if employed daily for a week or ten days, either with or without the simultaneous administration of arsenic, it materially shortens the duration of the majority of attacks occurring in children.

It is to be applied in the following way. A large sponge electrode of flexible brass, two by four inches, is thoroughly moistened with salt water. The hair of the patient is also thoroughly wetted, and the electrode applied over the side of the head above the ear. In hemi-chorea it need only be applied over the side opposite to the one affected. The other electrode is placed in the hand of the affected The electrode upon the scalp is made positive, and a stabile current of from three to six Stohrer's, or four to eight Daniell's cells, is passed from three to six minutes.

#### IN BASEDOW'S DISEASE.

Dr. Chvostek recommends (Centralbl. für Klin. Med.) the following method:

- 1. The ascending constant current applied to the cervical sympathetic on each side for at the most one minute.
- 2. The same to the spinal cord (the anode at about the fifth dorsal spine, the cathode high up in the cervical region).

3. Through the occiput (one pole at each mastoid process), and in certain cases also through the temples, a constant current for at the longest one minute, and so weak that the patient can feel but the slightest sensation of burning. Sometimes also local galvanization of the thyroid gland with a weak constant current for about four minutes, the current to be reversed at the end of each minute. The application should be made every day.

### ELECTRICITY AS A GALACTAGOGUE.

M. E. Labbée (Union Médicale) calls attention to the value of electricity as an adjuvant to other means for establishing or restoring the secretion of milk in puerperal women. When the secretion is absent or scanty, or when it has been suppressed from any cause, in addition to other modes of treatment (suction of the nipple, poultices of leaves of the Ricinus communis, etc.), it is well worth while to employ a weak current of electricity. The mammary gland is to be gently compressed between two electrodes consisting of moistened sponges. A mild current passed twice a day, for from ten to fifteen minutes at a time, will materially increase the functional activity of the gland. [The efficacy of static electricity in this direction has been reported in the Times by the writer, and confirmed by further observation in many cases.]

### ELECTRICITY IN AURAL PRACTICE.

In nervous deafness, McBride, in "Clinical Notes on Ear-Disease," Archives of Otology, vol. xii., Nos. 3 and 4, reports success in several severe cases from induction-currents applied to either tragus, without any other treatment.

Dr. H. L. Morse reports his observation of cases of tinnitus aurium treated in Vienna. Galvanism was employed,—the anode to the tragus, the cathode to the neck or other indifferent point. Weak currents were used in beginning, and these were gradually increased until sharp stabbing sensations were experienced, the force being thereupon reduced slowly to zero. The dull aching pain associated with many such cases was generally relieved promptly; often it was radically cured. If galvanism failed, faradic treatment usually was successful.

Electricity has also been extolled by Urbantschitsch in otalgia as valuable in relieving pain generally, without reference to the ultimate cause.

In the common earache of children, the writer has found galvanism successful after failure of chloroform-vapor, atropia, and the ordinary methods employed.

ELECTRICITY IN SUPERINVOLUTION AND SUBINVOLUTION OF THE UTERUS.

Dr. A. D. Rockwell, of New York, in a paper published in the Medical Record, January 19, 1884, comments on Dr. Fordyce Barker's remarks made at the last meeting of the American Gynæcological Society, and says,-

"In the following case, lately seen and treated, some of these symptoms were distinctly marked, and so far forth are confirmatory of Dr. Barker's experience.

"At stated periods there was severe headache, pelvic pains, and nausea. Associated with these symptoms, and far more persistent than any of them, was a condition of melancholia that became intensely aggravated immediately preceding the effort at menstruation, and manifesting itself by an insuperable aversion for persons and things that ordinarily excited in her no such feeling. Two years previously she had suffered from a difficult and dangerous labor, and since that time the menses had not appeared, excepting on two or three occasions, when it was exceedingly scanty and in other ways un-Upon measurement, the uterus natural. was found to be but about one and threefourths of an inch in length. The patient was treated almost daily, for about three months, by internal applications of both faradism and galvanism, when a slight show appeared, for the first time in eighteen months. At the next menstruation, a few weeks subsequently, the flow was much more abundant.

"In subinvolution of the uterus, my experience, though limited, has been somewhat greater than in superinvolution. The apparently paradoxical action of electricity, as illustrated in the treatment of superinvolution and subinvolution of the uterus, is not a new thing. We constantly find that it relieves both hyperæsthesia and anæsthesia. It is used successfully to excite torpid excretory processes, and also to restrain this function when too active, In the same way it may cause increase or it may cause diminution in the size of a

part or organ.

"Goitres, for example, are readily re-

duced in size, and sometimes entirely disappear, under simple external galvanization, and so with other forms of morbid growths. On the other hand, it is well known to all whose experience has been at all extended, that normal tissue may be surprisingly developed by persistent local applications.

#### ELECTRICITY IN DERMATOLOGY.

Dr. W. A. Hardaway contributes an article on this subject, which concludes as follows:

"I will close by enumerating a few of the diseases of the skin in which electrolysis may be confidently employed, viz.: pigmented nævi, small fibromata, miliary nodules of lupus, sebaceous cysts, xanthoma (Fox), warts, cutaneous horns, and some stages of epithelioma. From certain observations that I have made in regard to the action of this means in hypertrophied scar-tissue, I am inclined to look upon it favorably in keloid.

"In short, it may be confidently stated that whenever it is necessary to use a destructive agent on the skin, -one that is readily managed, that causes no hemorrhage, and leaves few scars,—there is none better or more efficient than electrolysis."

Massey believes (in the Medical News of January 5, 1884) that faradism cannot hold a prominent place in the therapeutics of skin diseases beyond stimulation of the sensory nerves. In alterations of the nutrition it is manifestly powerless, he states. In this he decides against the experience of dermatologists who advocate induction currents in varied forms of eczema, psoriasis, and acneiform eruptions. The writer has had decided good effect from faradism in these forms of disease, particularly in private practice. General faradization has thus repeatedly acted promptly and decidedly both from its local stimulating action and its tonic effect on the general health. Exception must likewise be taken to the statement that "in most individuals much more current will pass through a circuit including the body from the inner surface of one forearm to one of the popliteal spaces than will pass through a circuit made by placing the poles two inches apart on the back." Upon what this statement is founded we are at a loss to know. Many years ago we made the rule inflexible of definite measurement in applying currents to any and all cases,—not so many cells (for electro-motive force varies according to the condition of the battery), but so many millivebers (as the late nomenclature defines it), or so many volts, as now known,-and the measurement is always made with a reliable galvanometer, not a galvanoscope such as goes along with the ordinary battery. Practice in determining motor points and in applying indifferent electrodes or polar methods should familiarize those who have much to do with electricity, and we felt somewhat startled at this announcement. Not that it is novel, for the statement occurs now and then in popular handbooks. The mean of thirty experiments lately made in different persons with derived currents through a Wheatstone bridge, resistance intercalated by a standard rheostat and definitely measured by a tangent galvanometer, shows this statement to be very decidedly erroneous. The mean resistance was nine and seventeentwentieths times greater in the brachialpopliteal path than at the most resistant path of four inches on the back. At distances of two, three, and four inches, resistance was uniform or nearly so. Taking the general resistance of the human body as twenty-five hundred ohms, a distance of two or three inches between rheophores is negligible, when the electro-motive force is maintained by at least one hundred cells of good type, enough resistance being made by the rheostat to modify the current to a bearable degree and to steady it. The writer holds that the common method of applying a few cells is faulty, and the plan he uses is the one found by electricians in Europe to be the better one. The proof is easily made by any one possessing the proper equipment for absolute measurement and the ability to work it out. The simple word of a patient as to how it feels is at the bottom of this old but erroneous statement with most authors.

Three interesting cases are given which were cured by galvanism,—two of eczema and one of herpes.

Seiler exhibited at the late session of the Medical Society of the State of Pennsylvania a new arrangement of incandescent lighting of the eye, ear, throat, or nasal cavities. The effect was good, and in some respects superior to that obtained by gas or oil. The battery was an unusually handsome one, of the "electrodynamic" type.

246 NORTH TWENTIETH STREET.

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## AN OVARIAN TUMOR REMOVED BY ENUCLEATION.

BY DONNEL HUGHES, M.D.

A. W., age 28 years. Attended her in December, 1883, with acute peritonitis, which subsided in about two weeks. When the abdomen was examined after the swelling due to the peritonitis had subsided, a cystic tumor of the right ovary was discovered. On February 13, after consultation with Drs. S. S. Stryker, J. P. Stidham, Frederick Carrier, and Henry Muller, it was determined to remove it. With the kind assistance of the abovenamed gentlemen, I was enabled to perform the strength of the str

form the operation.

An incision was made in the median line of the abdomen, extending from about an inch below the umbilicus almost to the symphysis pubis. When the peritoneum was divided, it was found that the tumor was so adherent to the surrounding structures that it could not be removed in the ordinary way without great danger to the patient's life. We then determined to enucleate. The cyst was tapped, and the characteristic ovarian fluid escaped. An opening into the outer layer of the cyst was made, through which my fingers were introduced, and, after a great deal of tedious work, removal was accomplished. The bleeding was so slight that it was controlled by hot-water applications. Throughout the operation not a ligature was used. The abdominal cavity was thoroughly sponged, a glass drainage-tube inserted, and the wound closed with silver sutures made secure by compressed shot. The drainage-tube was removed on the eighth day, and the stitches on the tenth day, when the wound was healed, except the space that was occupied by the drainagetube. The wound was dressed with ung. carbolici, and the abdomen covered with cotton secured by a flannel binder. The urine was drawn every four hours for the first three days; after that time about three times in twenty-four hours. Onegrain opium suppositories were administered every four hours while awake and in pain.

The diet for the first week consisted of milk and lime-water at regular intervals. After that time it was much more liberal. She has entirely recovered, and is now able to go out of the house.

able to go out of the house.

## NOTES OF HOSPITAL PRACTICE.

### UNIVERSITY HOSPITAL.

SERVICE OF LOUIS A. DUHRING, M.D., PRO-FESSOR OF DISEASES OF THE SKIN IN THE UNIVERSITY OF PENNSYLVANIA.

Reported by HENRY WILE, M.D.

SMALL MILIARY PUSTULAR SYPHILODERM.

YOUNG man, 22 years of age, exhibits A a generalized eruption over the trunk and extremities, and in such cases it is always well to examine a large surface to obtain a general view. The eruption occupies the back from the nape of the neck downward, and is especially well marked on the buttocks, flexor surfaces of the thighs, and legs. It is a typical case of the small miliary pustular syphiloderm. lesions consist for the most part of pin-headsized, acuminate pustules, situated on a slightly elevated, reddish base. They show a tendency to form in clusters and circles, here and there running together, forming patches. On the upper part of the back are several acne lesions of a papular character in conjunction with numerous co-The same is to be noted upon medones. the forehead. The suboccipital, inguinal, and cervical glands are engorged, and the fauces are in a state of hyperæmia.

According to the statement of the patient, he had a hard chancre about eight weeks ago, and an induration is still perceptible on the right side of the inner surface of the prepuce near the sulcus. This eruption not infrequently is the first manifestation of cutaneous syphilis, skipping the erythematous or macular manifestation. It may make its appearance suddenly, or slowly, as in this case, developing during several weeks. It may, as has also been the case here, be accompanied by malaise, fever, and other general symptoms, besides slight itching. The patient is a weak, debilitated, somewhat cachectic subject, and the mixed treatment will be ordered, as follows:

R Hydrarygri biniodidi, gr. i; Potassii iodidi, 3iiss; Syr. sars. comp., f3iv. M.

Sig.—One teaspoonful with water aftereach meal.

#### HYPERIDROSIS OF THE SOLES.

A man, 25 years of age, presents a distressing condition of the soles of the feet. Little or nothing can be seen except a macerated state of the skin, due to profuse sweating. This is a tolerably common

affection, and consists of a functional disturbance of the sweat-apparatus. A saturated solution of boracic acid often exerts a beneficial influence; also tannic acid in solution or in powder, and salicylic acid. The following powder may also be used:

R Zinci oleati, 3ii; Talci,

Amyli, āā 3iii. M.

Sig.—Dusting-powder.

As a lotion, belladonna in the form of the tincture may also be applied with good results in some cases.

#### HEREDITARY INFANTILE SYPHILIS.

A child 5 weeks old presents an eruption which, according to the statement of the mother, first appeared about two weeks ago, and spread over almost the entire surface of the body, except about the genitalia. The diagnosis lies between eczema and syphilis, but the latter creates such characteristic lesions that it is almost impossible to confound it with any other affection. The eruption is a maculo-papular syphiloderm of a dull-red coppery color, and the large papular lesions and patches, especially on the lower extremities, present a distinct infiltration.

The case requires treatment, or the child will soon succumb. The treatment which I would recommend is in the form of baths of corrosive sublimate, or inunction of mercurial ointment, one part to three of lard, a small piece being smeared on a flannel bandage and bound to the abdomen of the child, and allowed to become rubbed in by the movements of the child.

#### TINEA FAVOSA CAPITIS.

A young man, 20 years of age, exhibits a typical example of this rare disease. It involves the greater part of the scalp, and exists in the form of sulphur-yellow-colored, more or less circular, cup-shaped lesions. The characteristic shape here is somewhat destroyed by the coalition of the lesions, yet here and there are split-pea-sized masses with a central depression.

It can with safety be said that the patient has been affected with this disease a long time, perhaps five or ten years, for in addition to the crusts there are hyperæmic scars caused by long-continued pressure of the crusts upon the corium. In all cases where there is an extensive development of the disease there is a characteristic "mousey" odor.

June 14, 1884]

Where the disease has existed for a long time, and the patient comes to us irregularly for treatment, it will take sometimes a year or longer to effect a cure; but where the patient is under constant observation, it may be successfully treated in four or six months. The hair must be clipped, and the crusts be removed with olive oil, this being allowed to remain on the part over-night, and in the morning washed off with soap and hot water. After the crusts are thoroughly removed, any of the numerous parasiticides may be employed. Here I will direct the application of a lotion composed of sulphurous acid one part to two or three parts of water, gradually increasing to full strength, followed later by sulphur ointment. Epilation must also be practised daily.

#### SYPHILODERMA PAPULOSUM.

A woman, aged 55 years, has a papulosquamous eruption irregularly over the entire surface of the body. The lesions consist of papules about the size of a small pea, some discrete, but for the most part confluent, forming large patches with in places the characteristic semicircular bor-There is considerable infiltration of all the lesions, and the surface is somewhat scaly, exhibiting a tendency to undergo absorption. Where the eruption has disappeared, superficial scars remain. It first appeared six months ago, and where as here we have the lesions occurring in patches, we may generally conclude that it is a late form of eruption.

On the lower extremities the lesions are on the way to absorption, and exhibit a dusky brownish color, together with the characteristic circinate form. The patient will probably recover slowly. The treatment consists of the internal administration of the following:

tion of the following:

R Hydrarygri biniodidi, gr. i;
Potassii iodidi, 3ii;
Syr. sarsap. comp., f3iv. M.
Sig.—One teaspoonful three times a day
after meals.

Locally the following lotion will be ordered:

R Hydrarg. corrosivi, gr. viii;
Alcoholis, f3ii;
Aquæ ad f3iv.
M.

Sig.—External use: apply twice daily as a lotion.

## TRANSLATIONS.

Two New Methods for the Recognition of Albumen and Sugar in the Urine.—Dr. Baas publishes the following procedure for the recognition of albumen and sugar in the urine by means of test-

papers.

1. Method for the Detection of Albumen. -One strip of paper is soaked in concentrated citric acid and dried, and may be stained red with litmus to distinguish it from the other strip of paper, which is impregnated with a three-per-cent. solution of corrosive sublimate containing twelve or fifteen per cent. of iodide of potassium, and also dried. One of each of these strips is shaken up in a glass containing the urine to be tested, and allowed to stand. If albumen be present, the urine at once becomes turbid, and in a short time a flocculent precipitate settles. This reaction is extremely sensitive, and will show the presence of one part of albumen in a thousand. Through the excess of iodide of potassium, iodide of mercury and potassium is formed, in the place of the chloride of mercury and potassium, with chloride of potassium in solution. It is through the formation of iodide of potassium and mercury that the albumen is precipitated.

2. Method for the Detection of Sugar.—
One strip of filter-paper is soaked in a strong solution of pure indigo, and a second in a concentrated solution of bicarbonate of sodium. A piece of the indigo paper is placed in water until it becomes of a light blue color (it must not be too dark). The urine is then added, and the mixture boiled for several minutes with some large pieces of the sodium paper. If sugar be present, the light blue color either disappears or changes into yellow. This test may also be applied to albuminous urine, as the bicarbonate of sodium holds the albumen in solution. It will serve for the detection of sugar in  $\frac{1}{40}$  or  $\frac{1}{100}$  per cent. solution.—Deutsche Med. Zeitung, April 3, 1884.

GONORRHEAL RHEUMATISM. — Struppi has had an opportunity of studying eight cases of gonorrheal rheumatism. He finds that it only occurs as a complication of gonorrhea when the primary disease has passed the compressor urethræ and implicates the prostatic portion of the

urethra. In all eight cases the rheumatic symptoms first appeared between the fifth and tenth week after the contraction of the disease. Ordinarily, the rheumatism was confined to one joint, especially the knee. In three of the eight cases the sacroiliac synchondrosis and the left maxillary articulation were also transiently affected, and in three cases there was epididymitis of the same side as the joint-complication. Fever and pain, when present at all, are much less marked in this disease than in ordinary acute rheumatism, while heartcomplications are always absent, though ophthalmia may occur. When rheumatism has once occurred as a complication of gonorrhœa, it is pretty sure to occur with subsequent gonorrhœas, or even with exacerbations of chronic prostatic gleet. With the onset of the rheumatism the discharge becomes reduced in amount, or may even disappear.

The treatment should aim at the prevention of the extension of the disease to the prostatic portion of the urethra. If the rheumatic affection be already present, the author recommends rest in bed, cold applications, reduction in diet, and the administration twice or three times daily of five or six grammes of salicylate of soda, and friction of the joint, after pain has disappeared, with glycerin solutions of iodine and iodide of potassium.—Centralb. f. Chirurgie, March 22, 1884. S.

THE MICRO-ORGANISMS OF ACUTE OSTEOMYELITIS. — In the Deutsche Medicinischen Wochenschrift, No. 46, 1883, Dr. Struck publishes an account of the microorganism which he had found in cases of acute osteomyelitis, and which he claimed was capable of cultivation, and, when injected into animals in whom the bones had been injured, would produce acute osteomyelitis.

Prof. Rosenbach, who has been for years occupied with this subject, and has also found the same micro-organism, and has succeeded in its cultivation and in the secondary production of acute osteomyelitis, questions the significance of Struck's results in that they attribute a specific action to this micro-organism. Rosenbach finds, as also is reported by Struck, that, unless the bones have been subjected to some traumatism, osteomyelitis is not produced. In his earlier studies on this disease, Rosenbach found that osteomyelitis might be developed by inoculation of the

most diverse bacterial forms, as, for example, by the fungus of lactic acid fermentation, if the bones have been previously injured. Rosenbach, therefore, concludes that the specific organism of osteomyelitis, if such exists, has not yet been discovered, and believes that acute infectious osteomyelitis, which often occurs in man without any accompanying traumatism of the bones, cannot be produced by any of the microorganisms as yet known.—St. Petersburger Med. Wochenschrift, April 26, 1884. s.

THE THERAPEUTIC APPLICATIONS OF CAFFEINE.—Prof. Riegel draws the following conclusions from an experimental study of the physiological action of caffeine:

1. Caffeine exerts a regulating action on the heart similar to that of digitalis.

2. In suitable doses, caffeine increases the power of the heart, reduces its rate of pulsations, and increases the arterial bloodpressure.

3. Caffeine produces a rapid increase in quantity of the urine.

4. The indications for the use of caffeine are the same as those which govern the employment of digitalis.

5. The most satisfactory results are obtained when small doses are given at short intervals.

 Caffein is distinguished from digitalis in that the results of its administration appear much sooner and are not complicated by a cumulative action.

7. Even in cases where digitalis has failed to produce any effect, caffeine may frequently be employed with success.

8. It is not advisable to accompany the administration of caffeine with narcotics; morphia should especially be avoided.

9. Caffeine in the form of soluble double salts, as the benzoate of sodium and caffeine and the salicylate of sodium and caffeine, is admirably suited for subcutaneous administration.—Berliner Klinisch. Wochenschrift, May 12, 1884.

MALIGNANT GROWTH OF THE BLADDER REMOVED BY LAPAROTOMY.—Prof. Guyon, in a case of a man 58 years of age, with hæmaturia, found a malignant neoplasm in the bladder, attached by a pedicle. By hypogastric incision the bladder was opened and a growth the size of a small hen's-egg removed. A Lister dressing and drainage tubes were employed. The patient recovered.—Bulletin Général de Thérapeutique, April 15, 1884.

#### PHILADELPHIA

## MEDICAL TIMES.

PHILADELPHIA, JUNE 14, 1884.

## EDITORIAL.

#### MEDICO-LEGAL NOTES.

THERE has been a good deal of discussion in the legal papers and before medico-legal societies over the bill before the New York Legislature allowing a person to prove his will before his death. It is conceded that it is very desirable to prevent the disgraceful scenes now frequently enacted in the courts upon the probate of a rich man's will; but there is a great difference of opinion as to the advisability of permitting the contents of a will to be made known prior to the testator's death. The present bill seems to require this to be done, and it is quite likely that a disinclination to have the nature of the distribution known will be as strong in influencing the action of testators as the desire to prevent unseemly wrangles in court over the will. The most practical proposition seems to be to allow a person to get the decision of a court as to his testamentary capacity, while directing that the will shall not be opened until after the testator's death.

A decision interesting to physicians was recently rendered in the courts of one of the Western States. Two surgeons had been employed in a certain case, but in different ways and for different compensations. The patient did not seem satisfied with the treatment, and refused to pay either of the bills rendered. As a result, suit was shortly brought by one of the surgeons, and defended on the ground that the services were of no value. court held, however, in favor of the surgeon, and judgment was given for him. This result was so unsatisfactory to the patient that he thereupon began a suit for

malpractice, and one of the defences interposed was that this question had been, in effect, adjudicated in the previous suit and could not be again raised. This defence the court held to be a good one, deciding that the former suit was a bar to the second one. This decision is only one of several in the various States holding the same way, so that a physician or surgeon need not fear a direct suit for damages from malpractice if the value of his services have been acknowledged in a suit to recover the amount of his bill.

Two corporations with long names have been litigating with each other in the United States Supreme Court on a question of some general interest. The parties are the Butchers' Union Slaughter-House and Live Stock Landing Company against the Crescent City Live Stock Landing and Slaughter-House Company, and the question is whether an exclusive privilege granted by the Legislature of Louisiana can be taken away by a provision of the new Constitution of the State. The decision which has just been rendered is to the effect that the Legislature exceeded its powers in granting an irrevocable license. The grounds of the decision are interesting, and are as follows: "(1.) That the regulation of certain unwholesome or dangerous trades, such as the slaughter-house business, the manufacture of gunpowder, etc., which may become detrimental to the public health or safety, is included in what may be called the police powers of the State. (2.) That the Legislature cannot by any contract limit the exercise of these police powers to the prejudice of the general welfare. The preservation of the public health and the protection of public morals are so necessary to the best interests of the social organization, that a wise policy forbids the legislative body to divest itself of the power to enact laws for the preservation of health and the repression of crime. Such power cannot be sold or bargained away under any circumstances, as if it were merely a privilege which the legislator could dispose of at his pleasure. (3.) It follows from these considerations that the State of Louisiana had, and could properly exercise, the power to revoke the exclusive privileges granted to the appellees in this case, and that the State Constitution of 1879, and the ordinances of the city of New Orleans complained of, are not void as impairing the obligations of the appellee's contract."

## JEQUIRITY.

RECENT researches into the peculiar action of jequirity in causing inflammation of the conjunctiva when introduced into the eye have disproved the hasty assumption that it was due to the presence of a bacillus. Dr. E. Klein has found that the bacillus was of itself quite incapable of causing ophthalmia, and, further, that the pus from a case of ophthalmia contained no bacilli. Dr. Neisser, of Breslau, has arrived independently at the same results, and Drs. Salomensen and Dirckinck-Holmfeld, of Copenhagen, claim to have found the active principle, although unable to extract any alkaloid.\* The active principle is insoluble in chloroform, alcohol, benzine, or ether; it is comparatively soluble in water, and very soluble in glycerin. It is destroyed by exposure to a temperature of from 65° to 70° C. maintained for an hour. The quantity of active principle contained in .00001 gramme of jequirity-seed developed a wellmarked conjunctivitis. If injected hypodermically into mice or frogs, the poison quickly kills.

In confirmation of the statement that the activity of jequirity is not due to a micro-organism, is the fact that the dialysate of the drug has been found to possess all the powers of the recent infusion, and has been used for some time in the

# ELECTION OF A SUCCESSOR TO PROFESSOR STILLÉ.

THE Trustees of the University of Pennsylvania, at a meeting held June 3, elected William Pepper, M.D., to the chair of Principles and Practice of Medicine in the Medical Department, which was made vacant at the close of the last session by the resignation of Prof. Alfred Stillé. The great ability of Prof. Pepper as a lecturer, as well as his high professional attainments, has been displayed in such a decided manner in the chair of Clinical Medicine that no doubt can be entertained, on the score of fitness for the position, of the wisdom of the choice of the Trustees.

Prof. Pepper brings to his high position experience, energy, and erudition, and, as he has worked so earnestly and successfully for the welfare of the University in the past, it is hoped that he will still continue his labors for an institution in which every citizen of Pennsylvania feels a direct and personal interest, and whose faithful management should be regarded as a sacred trust by those who are called upon to administer its affairs.

## LEADING ARTICLES.

# THE AGITATION IN GERMANY CONCERNING AMERICAN PORK.

IN Germany, when it happens that a number of persons become simultaneously the victims of one and the same disease, a report concerning the nature of the probable cause must be sent to the highest tribunal of the nation, the "Scientific Deputation," in Berlin, and must, therefore, come before Prof. Virchow, who is the pathologist of this Deputation. Thus it happened that Virchow, when acquainted with the interdict of Bismarck

New York hospitals; the dialysate, ordinarily being diluted with five parts of water, in this way has been found to act very satisfactorily.

<sup>\*</sup> Weekly Medical Review, April 5, and American Druggist, June.

on the importation of American pork, was surprised that in his official capacity he had not met with cases of trichinosis in American ham, bacon, or sausage. With his usual thoroughness and pre-eminent skill, he at once set about investigating this question. The result of his investigations has been published in the last number of his Archiv für Pathol. Anat. und Physiologie. On account of the great interest the affair has for Americans, and on account of an important discovery made by Virchow while pursuing these researches, we make the following abstract of his article:

Virchow proves, first, that there has been recorded in Germany only one instance of trichinosis imported with American pork. This was based upon no better foundation than the following. A Dr. Folke, of Bremen, now deceased, reported, two years ago, that a number of persons had become sick with trichinosis from eating this pork. He mentioned no names, gave no figures, and said in his report to the Bremen authorities (whom he induced to issue a warning against eating American pork and to request Chancellor Bismarck to interdict its importation) that he had found a large number of the chalky incrustations of trichinæ in the suspected ham. But he never discovered a living Similar requests from other parts of Germany reached the Chancellor, but in none of these cases was a living trichina detected.

Making use of the complicated machinery of the government at his disposal, and which permits the minutest inquiries in such cases, Virchow then commenced to demand reports from all medical substations. The result has been that he found no single case in all Germany where trichinosis had been traced to American pork, and not a single case where, even when the chalky incrustations were met with in the ham, bacon, or pork, a living trichina had been seen.

Next, the great pathologist himself examined one of those hams imported from America and containing the chalky deposits referred to, which were said to be infected with trichinæ. But a careful investigation, combined with a large series of similar researches, carried on under his own supervision, under the direction of his experienced and well-known assistant, Dr. Israel, and the expert of the Berlin slaughtering-establishments, proved that

these chalky incrustations had not been at all caused by the trichinæ, but by actinomycetes.

In a former article Virchow had shown that knots and calcareous deposits are met with in the muscular tissue of the hog, which are caused either by cysticercæ or But both are easily distinby guanin. guished by an expert in such examinations from those produced by trichinæ. more difficult is it to distinguish between the chalky incrustations of trichinæ and those of actinomycetes. These are the differential points: in trichinosis the chalky deposits are found embedded in the muscular tissue and surrounded by healthy fibres, only pushed out of place, while those of actinomycetes are larger, usually have a more rounded form, and the muscular tissue in which they reside is inflamed, and the degenerated muscular fibres mingle with the chalky deposit and grow into it. The finest test, however, is the microscopical examination of recent deposits after they have been colored by cochineal, when the fine, almost bacilluslike threads of the actinomycetes show themselves and thus establish the diagnosis.

The question which Virchow next proposes to solve is, Does pork containing actinomycetes cause disease in the human being, or is it innocuous? Thus far, Virchow knows but of one case, in which the disease was suspected to exist during life, where a hog seemed to be weak in the back and in general not to be well, and where, after its having been slaughtered, actinomycetes were discovered in its flesh. But, considering the importance of the subject, there can be no doubt that this question will be soon settled. How many car-loads of suspected pork may have been condemned and been dumped into the river because the pork was believed to contain trichinæ, while in fact there were no trichinæ, but actinomycetes?

That the interdict of the importation of American pork will be soon removed in Germany, we need not doubt. Since Virchow's report a great activity in the circles interested has been noted. That the whole question of trichinæ has entered a new phase also is certain, and we only hope that our country will contribute its share to these investigations, the importance of which cannot be overestimated.

# NOTES FROM SPECIAL CORRESPONDENTS.

CHICAGO.

HE Thirty-Fourth Annual Meeting of the Illinois State Medical Society was inaugurated at the First Methodist Church, in this city, May 20. About two hundred delegates and visitors were present, together with the usual number of persons interested in canvassing the profession in the interest of manufacturers of pharmaceutical preparations, surgical instruments, medical books, etc. The notable feature of the meeting was the address delivered by the President, Dr. Edmund Andrews. He touched lightly upon some unimportant matters relating to the rules for governing the Society, much the greater part of the paper being devoted to a consideration of the vexed question of ethics. The speaker said that all codes are imperfect, and the National Medical Code is not an exception. What medical men appear to want is not so much a better form of Code, as a better knowledge of the great principles underlying all codes. Neither ethics nor etiquette were created by medical societies. Ethics are the principles of morality, and are eternal, because founded on truth. Etiquette is the slow growth of social usages. Societies recognize and enforce these things, but they do not create them. Meanwhile, our disputes injure our honor before the community. The impression has gradually grown up, even in the very best circles, that physicians have an exceedingly artificial and complicated Code of Etiquette, which nobody but themselves can understand; that our system of usages has none of the gracious and genial flexibility of that form which prevails in general society, but is held with a cast-iron rigidity and is made to outrank the obligations even of morality and humanity. They generally believe that we will expel a man for a breach of etiquette sooner than for ignorance of his profession, neglect of his patients, or drunkenness on duty. We of the profession know, of course, that those charges are not true; yet there is just enough appearance of truth to give them a sting. Physicians indulge in foolish talk sometimes which half justifies these charges. There are men among us who do not seem to know the difference between ethics and etiquette. He said that a reputable and honest physician of this State had actually confessed that he did not know that ethical principles were laws of nature. He thought that they were created out of nothing but by the fiat of the American Medical Association, and had no authority or existence prior to their adoption by that body. That kind of ineffable non-sense shames us before the world. The old boors must die off. They could not plant in the minds of younger men those few main principles which constitute the substance of

all ethics above and of all useful etiquette below. The term ethics means morals. It comprises those grave eternal principles of right which bind all men in common, whatever their profession. Medical ethics are simply those same moral principles applied to medical conduct. The essential principles of medical ethics are three: 1, the physician must bring to his work a thorough knowledge of his profession; 2, he must use that knowledge diligently and honestly for the benefit of his patients; 3, he must shape all his conduct towards his patrons and his medical brethren in the spirit of honor, kindness, and generosity. There is, however, also a medical etiquette, and those who despise it ought to be taken back forty or fifty years and given a taste of the society of their predecessors. True, there were some kind, and even polished, physicians in those days, but there were others who could be characterized as nothing less than a herd of old centaurs cavorting over the corduroy roads, snorting aloud their contempt for each other. Conventional usages depended for their graciousness on an amount of flexibility and adaptation to circumstances, and demanded, for that reason, a measure of liberty. They varied with different localities, and changed with the passage of time. The rigid starch-bandage eti-quette is an abomination despised by every true gentleman. That creation in general society which cramps its whole existence into forms, to which it devotes the whole of its little mind, is called a fop or a dude, and in medical circles it is the "dudus medicus." The centaurs are dead, and the "dudes" are educating themselves up to a chronic state of paralysis, where they would be equally harmess, but none the less exasperating.

The doctor is, however, a warm advocate of the Code of the American Medical Association.

There were several interesting papers read, a banquet at the Grand Pacific Hotel, and a select private entertainment to a limited number. The meeting proved quite a success, and adjourned to meet next year at Springfield, Iliinois.

At the last meeting of the Alumni Association of Chicago Medical College, the Secretary stated that the Association numbered eight hundred and thirty-four, of whom sixty-six were deceased, almost half of this latter number having succumbed to phthisis. The other causes of death were enumerated under twenty heads. The mortality was one in twelve. The average age of those deceased was thirty years.

M.

May 31, 1884.

DR. WILLIAM BARTON HOPKINS has been elected one of the Attending Surgeons, and Henry M. Fisher one of the Attending Physicians, to the Episcopal Hospital of Philadelphia.

#### WEST VIRGINIA.

A N invitation to be present at the annual meeting of the West Virginia State Medical Society at Clarksburg reached me just as the recent "hot spell" began to make life in the city uncomfortable and a vision of green hills and running streams especially agreeable to contemplate. Packing up a few necessary articles of wearing-apparel and a bottle of cholera medicine,—Clarksburg is a local-option town,-I reached my destination on May 21. The sessions of the Society were held on this and the succeeding day, and were moderately well attended. I was agreeably impressed with the superior knowledge and practical common sense of the physicians in attendance, who came from all parts of the State. It seemed rather curious, however, that the physicians of Clarksburg, with two or three exceptions, held aloof from the meeting.

The papers read and the discussions thereon reflect credit upon the participants, and the report of the Society's work at this meeting will make a creditable showing. I was par-ticularly struck by the practical character of a therapeutic suggestion of Dr. Reeves, secretary of the State Board of Health. Discussing the treatment of typhoid fever, Dr. Reeves said he had of late rarely used quinine in this disease. Especially where the tongue is dry, red, and pointed, he abstains from its use, regarding it in these cases as a veritable toxic agent to the nervous system. In this condition he gives ergot internally, and, when the temperature is high, reduces it by cold applied to the wrists. He wraps a coil of rubber tubing around the wrists, and then passes a stream of ice-water constantly through the coil from the reservoir of a fountain-syringe. By this means the temperature of the body can be promptly and effectually reduced. He thinks the ergot diminishes the likelihood of intestinal hemorrhage and prevents the temperature rising as high as when it is omitted.

A lively discussion on diphtheria brought out the usual differences of opinion regarding the diagnosis, causation, and treatment of this disease. Dr. Carpenter, of Moorefield, related the history of an outbreak of the disease in his own family. Every one of eleven inmates of the house, himself included, was attacked. He attributed the outbreak to insanitary conditions produced by much decaying vegetable matter in a damp cellar. None of the family had been, to his knowledge, exposed to contagion. He thinks he observed a diminution in the virulence of the disease in those members of his family who had taken a solution of quinine, chlorate of potassium, and tincture of iron as a prophylactic.

An interesting paper was read by Dr. Fleming Howell, of Clarksburg, who de-

scribed a case of œsophagotomy for the removal of a silver fifty-cent piece. The operation was successful, and the patient recovered.

In a paper, à propos of a recent communication by Dr. Thomas to the New York Academy of Medicine, on "Listerism in Obstetrics," Dr. Sharp, of Volcano, took the position that, in rural practice at all events, cleanliness and common sense were the only needed antiseptics and prophylactics against puerperal diseases.

On invitation of Dr. W. J. Bland, the su-perintendent of the West Virginia Insane Asylum at Weston, I visited that institution after adjournment of the Society. The asylum is large and well built, and has comfortable accommodations for over six hundred patients. It is now pretty well filled, though seemingly not overcrowded. The rooms, halls, and furniture were neat and clean. The water-supply is abundant, and each hall has lavatories, baths, and water-closets. The patients seemed all cleanly in their habits. All the water-closets I examined are of the Jennings pattern and were in good condition. A defect in the water-supply of the closets is that the water is taken directly from the common water-supply. The sewage and all waste and storm water are carried off by an independent conduit, which empties into the north fork of the Monongahela, about a mile distant from the buildings. The only objection to the sewage is the large size of the pipes and main sewer, which allows decomposition and the formation of

The system of ventilation is elaborate, but defective, although defects are being gradually removed under the intelligent direction of the engineer, Mr. Clifton.

The heating-arrangements are admirable, with the single grave defect that the air passing through the coil-boxes to be heated is taken from the basement, instead of being taken from without the building. This defect will soon be removed, however.

The kitchen, bakery, and laundry are separated entirely from the hospital. The building is lighted with gas, which is manufactured in the institution.

The inmates are kept employed as much as possible, but it seemed to me that too many were kept under mechanical restraint. It is true I saw less than a dozen in straitwaistcoats or bracelets, but there were, I thought, just that number too many.

Altogether, however, the institution seems to be well conducted, and reflects credit upon the State of West Virginia, its liberal board of trustees, and its competent medical and administrative staff. There are few States that make better provision for this unfortunate class of the population.

CORSAIR.

CLARKSBURG, W. VA., May 23, 1884.

## PROCEEDINGS OF SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY, MAY I, 1884.

The President, R. A. CLEEMANN, M.D., in the chair.

DR. HENRY BEATES, JR., read a report of a case of

CYSTIC LEIOMYOMA UTERI

the fluid of which contained the Drysdale corpuscle and other characteristics of typical ovarian cystoma. The early history of this case, owing to the inability of the patient to state with precision a few minor details, is somewhat incomplete, yet sufficient accuracy is available to supply a clear, unequivocal clinical record and distinctly demonstrate that the Drysdale corpuscle, where found in considerable number in fluid derived from the abdominal cavity, is not pathognomonic of cystoma ovarii.

Mrs. L., æt. 51, housewife, a mother, noticed, four years prior to admission to the Philadelphia Lying-in Charity Hospital, a lump in the lower abdominal region. The menopause had not yet occurred. The tumor was round, painless, and occasioned no inconvenience. Its development was comparatively slow, and not until it had attained large dimensions did it occasion constitutional derangement. When admitted, the patient was markedly asthenic, and suffered from mechanical dyspnæa, gastric irritability, subacute proctitis, and pyrexia; the temperature ranged from 99° to 100.5°.

The facies ovariana, and the peculiar atrophy of the soft tissues of the supra-thoracic region, so constantly attendant upon ovarian cystoma, were present in a conspicuous degree. The notes of measurement were unfortunately lost, but an estimate of the size can be formed when it is remarked that the tumor completely occupied the abdominal cavity, everting the xiphoid cartilage and inferior ribs, bulging far over the lumbar regions, and extending over the pubes down and between the thighs. The circumference at its largest portion was about fifty-one inches. The superficial abdominal veins were conspicuous, and the cellular tissue, from the mammary zone to the feet, very œdematous. Palpation and percussion detected and revealed signs of ovarian cyst. The fluctuation was more perceptible in the longitudinal than in the transverse diameter. In the sub-hepatic region a decided resistance to pressure was noticeable, dependent upon a thickening of the cyst-wall. This mass was attached to the liver at the outer two-thirds of the inferior border. At the inner third there intervened a space which emitted a percussion-tympany, the note being that of colic resonance. The urine afforded

negative evidence. As the asthenia was so profound, it was deemed advisable to tap the cyst in order to obtain an opportunity of improving the general strength and rendering ovariotomy bearable.

Dr. Albert H. Smith, who had charge of the case, tapped (employing the ordinary curved trocar and canula used in tapping per curiam the urinary bladder), and withdrew twenty-seven pints of a dark, muddy-brown, grumous fluid, possessing a neutral reaction, sp. gr. 1018, and containing blood and par-albumen. Microscopically, I found red bloodcorpuscles, leucocytes, endothelium in various degrees of retrograde metamorphosis, i.e., the corpuscles of Bennett, Nunn, and Glugé, the ovarian cell of Drysdale, cholesterine, and amorphous detritus. It did not coagulate spontaneously. These micro-chemical properties, coupled with the physical signs, determined a diagnosis of ovarian cyst. The grumous character of the fluid and the existence of the sub-hepatic mass inclined to the belief that we were dealing with a cyst in which carcinosis had become established, and that either metastasis to the liver had occurred, or there co-existed carcinoma hepatis. The idea of ovariotomy was abandoned, and analepsis instituted, with the effect of improving the general condition sufficiently to enable her to be removed to her home, where she remained under the care of Dr. L. Brewer Hall. In about five months the tumor had refilled, and during my absence Prof. James B. Walker, at Dr. Hall's request, tapped the second time. The fluid was clear, and presented the appearance of ovarian fluid. In the winter of 1882, I tapped a third time, employing an aspirator. The gentleman assisting me inadvertently applied the exit-nozzle of the air-pump to the vacuum-jar, and when the trocar was introduced there occurred an inflation of the cyst. The air apparently inflated a series of variously-sized cysts, that were arranged circumferentially and emitted percussion-notes of different pitch. From this circumstance, which occasioned no evil consequences, we concluded that there existed a number of small cysts communicating with the principal. As the evacuation of the fluid progressed, the umbilical region sank in, disclosing a circumferential mass, presenting the appearance of a wreath, as it were, un-derlying the abdominal parietes. This ridge could be firmly grasped and moved to a limited extent. This peculiarity determined me to examine the fluid carefully. I also had Dr. Formad examine it, and he pro-nounced it ovarian. The class at the University of Pennsylvania was supplied, and the ovarian cell of Drysdale demonstrated, The cyst refilled more rapidly, and I tapped a fourth time, removing a large bucketful of clear fluid, containing the same corpuscle in greater number than the previous specimens; large flakes of coagulated lymph were also

evacuated. The circumferential mass had undergone great development, as had also the sub-hepatic induration. The re-accumulation of fluid was more rapid, and the de-terioration of health steadily progressing. Death terminated suffering about six years after the first manifestations. During the last days of the patient's life, Prof. Walker, in the absence of Dr. Hall, was in attendance. His letter details the mode of death and the results of the autopsy:

"Mrs. L. died on the Sunday night after your departure. Her bowel-trouble rapidly disappeared, but the symptoms of cerebral anæmia deepened, with hallucinations and

convulsions, until death.

"At the autopsy the tumor was found to have membranous walls over an area of nine square inches above the navel, in the middle line; elsewhere the cyst-wall was thick, as per sample. In some localities, notably in the hypochondria, the wall was quite thick. Firm attachments existed over the anterior wall of the sac with the parietal peritoneum, and the intestines were carried far up under the liver and stomach and were attached to the tumor. The liver was also attached. The entire abdominal cavity was occupied with the tumor, and it dipped into and occupied the pelvis. No attachments existed at the sides, or behind. The uterus was forced downward. One ovary, the right, was normal, and attached loosely to the pelvic brim. The other is presumably occupied by the tumor. The cavity of the tumor was occupied by a brownish gelatinous fluid resembling soft soap. It was transparent, but had a sediment consisting of detritus from the inner wall of the sac. There was but one cyst, and the entire interior was similar in its lining, being apparently under-going erosion. The contents of the cyst measured over a Yankee bucketful. As the tumor was too immense to even contemplate removal, and as the variably thick wall was everywhere similar save in the pelvic portion, which was darkened from hypostatic congestion, I removed the uterus and the portion of the tumor immediately surrounding it, extend-ing the section through the cyst-wall." (This specimen was presented to the Society.)

Sections for microscopic study were prepared from different portions of the cyst-wall, and were all demonstrative of leiomyoma. Those from the sub-hepatic portion resembled spindle-celled sarcoma, but were clearly differentiated by the elongated nuclei and want of sarcomatous relationship of cells to capillaries. The identity of the clinical phenomena of this neoplasm with those of ovarian cyst is a matter of special attention. In the early stage a marked peculiarity consisted of the sub-hepatic enlargement and induration; a morbid resistance to pressure, noticed in the inferior lumbar regions after the first tapping and attributed to the œdema, is now seen to have depended upon a thickening wall, which

at that time was insufficiently developed, save in the hepatic region, to attract special attention. That all doubt regarding the nature of this neoplasm may be removed, attention is directed to the left ovary, which has undergone marked atrophy, and is to be seen in the specimen. I submitted some sections to Dr. Formad, who pronounced them ovarian. The origin of the cyst from the fundus uteri is evident upon examination. With the facts before us, I think it is conclusively proved that the ovarian corpuscle of Drysdale, while a valuable aid to diagnosis, does certainly

not possess pathognomonic value.

Dr. DRYSDALE regretted that Dr. Beates had not sent him a specimen of the fluid removed from this tumor, especially as he had more than one opportunity of doing so. While having the highest regard for the opinion of the gentlemen who examined it, still, so many errors had been made in these investigations that it would have been a satisfaction to him to have examined it himself. But, apart from this regret, he considered it by no means proved that the cyst in question was not ova-rian. The portion of tumor left attached to the uterine wall in the specimen resembled a closely adherent ovarian cyst, such as he had met with repeatedly. The little mass lying close to the uterus, described as an atrophied ovary, did not present any resemblance to an ovary, nor did it occupy the usual position of that body. In the description no reference had been made to the color of the tumor, which has an important diagnostic value, the uterine fibro-cyst being usually livid or purplish in color, while the ovarian had a white pearly hue. It was especially in cases like that of fibro-cyst of the uterus where the importance of the ovarian cell in diagnosis was well marked. In his investigation of these tumors he had never met with the cell which he had described as ovarian. Mistakes were very easily made in the differential diagnosis of such tumors, and in fact in many cases the diagnosis could not be established except by the examination of the fluid or by opening the abdomen. For want of this examination of the fluid he had seen Spencer Wells make the abdominal section to remove a tumor which he had diagnosticated as ovarian, but which proved to be uterine. Dr. Marion Sims had sent him on three different occasions, and without telling him that they were from the same patient, specimens of a fluid which he thought was ovarian, obtained from a cyst in the abdomen. Dr. Drysdale assured him that the fluid was not ovarian; but after the examination of the last specimen, Dr. Sims, still doubting, determined to operate, and found a uterine fibro-cyst. The history and all the characteristics of the tumor described this evening were ovarian, and the specimen and autopsy were not sufficient to establish the diagnosis of uterine cyst.

Dr. B. F. BAER remarked that the speci-

# NOTES FROM SPECIAL CORRESPONDENTS.

CHICAGO.

'HE Thirty-Fourth Annual Meeting of the Illinois State Medical Society was inaugurated at the First Methodist Church, in this city, May 20. About two hundred delegates and visitors were present, together with the usual number of persons interested in canvassing the profession in the interest of manufacturers of pharmaceutical preparations, surgical instruments, medical books, etc. The notable feature of the meeting was the address delivered by the President, Dr. Edmund Andrews. He touched lightly upon some unimportant matters relating to the rules for governing the Society, much the greater part of the paper being devoted to a consideration of the vexed question of ethics. The speaker said that all codes are imperfect, and the National Medical Code is not an exception. What medical men appear to want is not so much a better form of Code, as a better knowl-edge of the great principles underlying all codes. Neither ethics nor etiquette were created by medical societies. Ethics are the principles of morality, and are eternal, because founded on truth. Etiquette is the slow growth of social usages. Societies recognize and enforce these things, but they do not create them. Meanwhile, our disputes injure our honor before the community. The impression has gradually grown up, even in the very best circles, that physicians have an exceedingly artificial and complicated Code of Etiquette, which nobody but themselves can understand; that our system of usages has none of the gracious and genial flexibility of that form which prevails in general society, but is held with a cast-iron rigidity and is made to outrank the obligations even of morality and humanity. They generally believe that we will expel a man for a breach of etiquette sooner than for ignorance of his profession, neglect of his patients, or drunkenness on duty. We of the profession know, of course, that those charges are not true; yet there is just enough appearance of truth to give them a sting. Physicians indulge in foolish talk sometimes which half justifies these charges. There are men among us who do not seem to know the difference between ethics and etiquette. He said that a reputable and honest physician of this State had actually confessed that he did not know that ethical principles were laws of nature. He thought that they were created out of nothing but by the fiat of the American Medical Association, and had no authority or existence prior to their adoption by that body. That kind of ineffable non-sense shames us before the world. The old boors must die off. They could not plant in the minds of younger men those few main principles which constitute the substance of

all ethics above and of all useful etiquette below. The term ethics means morals, It comprises those grave eternal principles of right which bind all men in common, whatever their profession. Medical ethics are simply those same moral principles applied to medical conduct. The essential principles of medical ethics are three: 1, the physician must bring to his work a thorough knowledge of his profession; 2, he must use that knowledge diligently and honestly for the benefit of his patients; 3, he must shape all his conduct towards his patrons and his medical brethren in the spirit of honor, kindness, and generosity. There is, however, also a medical etiquette, and those who despise it ought to be taken back forty or fifty years and given a taste of the society of their predecessors. True, there were some kind, and even pol-ished, physicians in those days, but there were others who could be characterized as nothing less than a herd of old centaurs cavorting over the corduroy roads, snorting aloud their contempt for each other. Conven-tional usages depended for their graciousness on an amount of flexibility and adaptation to circumstances, and demanded, for that reason, a measure of liberty. They varied with different localities, and changed with the pas-sage of time. The rigid starch-bandage eti-quette is an abomination despised by every true gentleman. That creation in general society which cramps its whole existence into forms, to which it devotes the whole of its little mind, is called a fop or a dude, and in medical circles it is the "dudus medicus." The centaurs are dead, and the "dudes" are educating themselves up to a chronic state of paralysis, where they would be equally harmless, but none the less exasperating.

The doctor is, however, a warm advocate of the Code of the American Medical Association

There were several interesting papers read, a banquet at the Grand Pacific Hotel, and a select private entertainment to a limited number. The meeting proved quite a success, and adjourned to meet next year at Springfield, Illinois.

At the last meeting of the Alumni Association of Chicago Medical College, the Secretary stated that the Association numbered eight hundred and thirty-four, of whom sixty-six were deceased, almost half of this latter number having succumbed to phthisis. The other causes of death were enumerated under twenty heads. The mortality was one in twelve. The average age of those deceased was thirty years.

M.

May 31, 1884.

DR. WILLIAM BARTON HOPKINS has been elected one of the Attending Surgeons, and Henry M. Fisher one of the Attending Physicians, to the Episcopal Hospital of Philadelphia.

#### WEST VIRGINIA.

A N invitation to be present at the annual meeting of the West Virginia State Medical Society at Clarksburg reached me just as the recent "hot spell" began to make life in the city uncomfortable and a vision of green hills and running streams especially agreeable to contemplate. Packing up a few necessary articles of wearing-apparel and a bottle of cholera medicine,-Clarksburg is a local-option town,-I reached my destination on May 21. The sessions of the Society were held on this and the succeeding day, and were moderately well attended. I was agreeably impressed with the superior knowledge and practical common sense of the physicians in attendance, who came from all parts of the State. It seemed rather curious, however, that the physicians of Clarksburg, with two or three exceptions, held aloof from

The papers read and the discussions thereon reflect credit upon the participants, and the report of the Society's work at this meeting will make a creditable showing. I was par-ticularly struck by the practical character of a therapeutic suggestion of Dr. Reeves, secretary of the State Board of Health. Discussing the treatment of typhoid fever, Dr. Reeves said he had of late rarely used quinine in this disease. Especially where the tongue is dry, red, and pointed, he abstains from its use, regarding it in these cases as a veritable toxic agent to the nervous system. In this condition he gives ergot internally, and, when the temperature is high, reduces it by cold applied to the wrists. He wraps a coil of rubber tubing around the wrists, and then passes a stream of ice-water constantly through the coil from the reservoir of a fountain-syringe. By this means the temperature of the body can be promptly and effectually reduced. He thinks the ergot diminishes the likelihood of intestinal hemorrhage and prevents the temperature rising as high as when it is omitted.

A lively discussion on diphtheria brought out the usual differences of opinion regarding the diagnosis, causation, and treatment of this disease. Dr. Carpenter, of Moorefield, related the history of an outbreak of the disease in his own family. Every one of eleven inmates of the house, himself included, was attacked. He attributed the outbreak to insanitary conditions produced by much decaying vegetable matter in a damp cellar. None of the family had been, to his knowledge, exposed to contagion. He thinks he observed a diminution in the virulence of the disease in those members of his family who had taken a solution of quinine, chlorate of potassium, and tincture of iron as a prophy-

lactic.

An interesting paper was read by Dr. Fleming Howell, of Clarksburg, who de-

scribed a case of œsophagotomy for the removal of a silver fifty-cent piece. The operation was successful, and the patient recovered.

In a paper, a propos of a recent communication by Dr. Thomas to the New York Academy of Medicine, on "Listerism in Obstetrics," Dr. Sharp, of Volcano, took the position that, in rural practice at all events, cleanliness and common sense were the only needed antiseptics and prophylactics against puerperal diseases.

On invitation of Dr. W. J. Bland, the su-perintendent of the West Virginia Insanc Asylum at Weston, I visited that institution after adjournment of the Society. The asylum is large and well built, and has comfortable accommodations for over six hundred patients. It is now pretty well filled, though seemingly not overcrowded. The rooms, halls, and furniture were neat and clean. The water-supply is abundant, and each hall has lavatories, baths, and water-closets. The patients seemed all cleanly in their habits. All the water-closets I examined are of the Jennings pattern and were in good condi-tion. A defect in the water-supply of the closets is that the water is taken directly from the common water-supply. The sewage and all waste and storm water are carried off by an independent conduit, which empties into the north fork of the Monongahela, about a mile distant from the buildings. The only objection to the sewage is the large size of the pipes and main sewer, which allows decomposition and the formation of sewer-gas.

The system of ventilation is elaborate, but defective, although defects are being gradually removed under the intelligent direction

of the engineer, Mr. Clifton.

The heating-arrangements are admirable, with the single grave defect that the air passing through the coil-boxes to be heated is taken from the basement, instead of being taken from without the building. This defect will soon be removed, however.

The kitchen, bakery, and laundry are sep-arated entirely from the hospital. The building is lighted with gas, which is manufactured

in the institution.

The inmates are kept employed as much as possible, but it seemed to me that too many were kept under mechanical restraint. It is true I saw less than a dozen in straitwaistcoats or bracelets, but there were, I thought, just that number too many.

Altogether, however, the institution seems to be well conducted, and reflects credit upon the State of West Virginia, its liberal board of trustees, and its competent medical and administrative staff. There are few States that make better provision for this unfortunate class of the population.

CORSAIR.

CLARKSBURG, W. VA., May 23, 1884.

## PROCEEDINGS OF SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY, MAY 1, 1884.

The President, R. A. CLEEMANN, M.D., in the chair.

DR. HENRY BEATES, JR., read a report of a case of

#### CYSTIC LEIOMYOMA UTERI

the fluid of which contained the Drysdale corpuscle and other characteristics of typical ovarian cystoma. The early history of this case, owing to the inability of the patient to state with precision a few minor details, is somewhat incomplete, yet sufficient accuracy is available to supply a clear, unequivocal clinical record and distinctly demonstrate that the Drysdale corpuscle, where found in considerable number in fluid derived from the abdominal cavity, is not pathognomonic of cystoma ovarii.

Mrs. L., æt. 51, housewife, a mother, noticed, four years prior to admission to the Philadelphia Lying-in Charity Hospital, a lump in the lower abdominal region. The menopause had not yet occurred. The tumor was round, painless, and occasioned no inconvenience. Its development was comparatively slow, and not until it had attained large dimensions did it occasion constitutional derangement. When admitted, the patient was markedly asthenic, and suffered from mechanical dyspnæa, gastric irritability, subacute proctitis, and pyrexia; the temperature ranged from 99° to

100.50 The facies ovariana, and the peculiar atrophy of the soft tissues of the supra-thoracic region, so constantly attendant upon ovarian cystoma, were present in a conspicuous degree. The notes of measurement were unfortunately lost, but an estimate of the size can be formed when it is remarked that the tumor completely occupied the abdominal cavity, everting the xiphoid cartilage and inferior ribs, bulging far over the lumbar regions, and extending over the pubes down and between the thighs. The circumference at its largest portion was about fifty-one inches. The superficial abdominal veins were conspicuous, and the cellular tissue, from the mammary zone to the feet, very ædematous. Palpation and percussion detected and revealed signs of ovarian cyst. The fluctuation was more perceptible in the longitudinal than in the transverse diameter. In the sub-hepatic region a decided resistance to pressure was noticeable, dependent upon a thickening of the cyst-wall. This mass was attached to the liver at the outer two-thirds of the inferior border. At the inner third there intervened a space which emitted a percussion-tympany, the note being that of colic resonance. The urine afforded

negative evidence. As the asthenia was so profound, it was deemed advisable to tap the cyst in order to obtain an opportunity of improving the general strength and rendering ovariotomy bearable.

Dr. Albert H. Smith, who had charge of the case, tapped (employing the ordinary curved trocar and canula used in tapping per curiam the urinary bladder), and withdrew twenty-seven pints of a dark, muddy-brown, grumous fluid, possessing a neutral reaction, sp. gr. 1018, and containing blood and par-albumen. Microscopically, I found red bloodcorpuscles, leucocytes, endothelium in various degrees of retrograde metamorphosis, i.e., the corpuscles of Bennett, Nunn, and Glugé, the ovarian cell of Drysdale, cholesterine, and amorphous detritus. It did not coagulate spontaneously. These micro-chemical properties, coupled with the physical signs, determined a diagnosis of ovarian cyst. The grumous character of the fluid and the existence of the sub-hepatic mass inclined to the belief that we were dealing with a cyst in which carcinosis had become established, and that either metastasis to the liver had occurred. or there co-existed carcinoma hepatis. The idea of ovariotomy was abandoned, and analepsis instituted, with the effect of improving the general condition sufficiently to enable her to be removed to her home, where she remained under the care of Dr. L. Brewer Hall. In about five months the tumor had refilled, and during my absence Prof. James B. Walker, at Dr. Hall's request, tapped the second time. The fluid was clear, and presented the appearance of ovarian fluid. In the winter of 1882, I tapped a third time, employing an aspirator. The gentleman assisting me inadvertently applied the exit-nozzle of the air-pump to the vacuum-jar, and when the trocar was introduced there occurred an inflation of the cyst. The air apparently inflated a series of variously-sized cysts, that were arranged circumferentially and emitted percussion-notes of different pitch. From this circumstance, which occasioned no evil consequences, we concluded that there existed a number of small cysts communicating with the principal. As the evacuation of the fluid progressed, the umbilical region sank in, disclosing a circumferential mass, presenting the appearance of a wreath, as it were, un-derlying the abdominal parietes. This ridge could be firmly grasped and moved to a limited extent. This peculiarity determined me to examine the fluid carefully. I also had Dr. Formad examine it, and he pronounced it ovarian. The class at the University of Pennsylvania was supplied, and the ovarian cell of Drysdale demonstrated. The cyst refilled more rapidly, and I tapped a fourth time, removing a large bucketful of clear fluid, containing the same corpuscle in greater number than the previous specimens; large flakes of coagulated lymph were also evacuated. The circumferential mass had undergone great development, as had also the sub-hepatic induration. The re-accumulation of fluid was more rapid, and the deterioration of health steadily progressing. Death terminated suffering about six years after the first manifestations. During the last days of the patient's life, Prof. Walker, in the absence of Dr. Hall, was in attendance. His letter details the mode of death and the results of the autopsy:

"Mrs. L. died on the Sunday night after your departure. Her bowel-trouble rapidly disappeared, but the symptoms of cerebral anæmia deepened, with hallucinations and

convulsions, until death.

"At the autopsy the tumor was found to have membranous walls over an area of nine square inches above the navel, in the middle line; elsewhere the cyst-wall was thick, as per sample. In some localities, notably in the hypochondria, the wall was quite thick. Firm attachments existed over the anterior wall of the sac with the parietal peritoneum, and the intestines were carried far up under the liver and stomach and were attached to the tumor. The liver was also attached. The entire abdominal cavity was occupied with the tumor, and it dipped into and occupied the pelvis. No attachments existed at the sides, or behind. The uterus was forced downward. One ovary, the right, was normal, and attached loosely to the pelvic brim. The other is presumably occupied by the tumor. The cavity of the tumor was occupied by a brownish gelatinous fluid resembling soft soap. It was transparent, but had a sediment consisting of detritus from the inner wall of the sac. There was but one cyst, and the entire interior was similar in its lining, being apparently undergoing erosion. The contents of the cyst measured over a Yankee bucketful. As the tumor was too immense to even contemplate removal, and as the variably thick wall was everywhere similar save in the pelvic portion, which was darkened from hypostatic congestion, I removed the uterus and the portion of the tumor immediately surrounding it, extending the section through the cyst-wall." (This specimen was presented to the Society.)

Sections for microscopic study were prepared from different portions of the cyst-wall, and were all demonstrative of leiomyoma. Those from the sub-hepatic portion resembled spindle-celled sarcoma, but were clearly differentiated by the elongated nuclei and want of sarcomatous relationship of cells to capillaries. The identity of the clinical phenomena of this neoplasm with those of ovarian cyst is a matter of special attention. In the early stage a marked peculiarity consisted of the sub-hepatic enlargement and induration; a morbid resistance to pressure, noticed in the inferior lumbar regions after the first tapping and attributed to the cedema, is now seen to have depended upon a thickening wall, which

at that time was insufficiently developed, save in the hepatic region, to attract special attention. That all doubt regarding the nature of this neoplasm may be removed, attention is directed to the left ovary, which has under-gone marked atrophy, and is to be seen in the specimen. I submitted some sections to Dr. Formad, who pronounced them ovarian. The origin of the cyst from the fundus uteri is evident upon examination. With the facts before us, I think it is conclusively proved that the ovarian corpuscle of Drysdale, while a valuable aid to diagnosis, does certainly

not possess pathognomonic value.

Dr. DRYSDALE regretted that Dr. Beates had not sent him a specimen of the fluid removed from this tumor, especially as he had more than one opportunity of doing so. While having the highest regard for the opinion of the gentlemen who examined it, still, so many errors had been made in these investigations that it would have been a satisfaction to him to have examined it himself. But, apart from this regret, he considered it by no means proved that the cyst in question was not ovarian. The portion of tumor left attached to the uterine wall in the specimen resembled a closely adherent ovarian cyst, such as he had met with repeatedly. The little mass lying close to the uterus, described as an atrophied ovary, did not present any resemblance to an ovary, nor did it occupy the usual position of that body. In the description no reference had been made to the color of the tumor, which has an important diagnostic value, the uterine fibro-cyst being usually livid or purplish in color, while the ovarian had a white pearly hue. It was especially in cases like that of fibro-cyst of the uterus where the importance of the ovarian cell in diagnosis was well marked. In his investigation of these tumors he had never met with the cell which he had described as ovarian. Mistakes were very easily made in the differential diagnosis of such tumors, and in fact in many cases the diagnosis could not be established except by the examination of the fluid or by opening the abdomen. For want of this examination of the fluid he had seen Spencer Wells make the abdominal section to remove a tumor which he had diagnosticated as ovarian, but which proved to be uterine. Dr. Marion Sims had sent him on three different occasions, and without telling him that they were from the same patient, specimens of a fluid which he thought was ovarian, obtained from a cyst in the abdomen. Dr. Drysdale assured him that the fluid was not ovarian; but after the examination of the last specimen, Dr. Sims, still doubting, determined to operate, and found a uterine fibro-cyst. The history and all the characteristics of the tumor described this evening were ovarian, and the specimen and autopsy were not sufficient to establish the diagnosis of uterine cyst. Dr. B. F. BAER remarked that the specimen seemed to be a section of a fibroma arising from the uterus, but it is too small to be satisfactory, or to prove its origin. His personal experience had taught him the diagnostic value of the Drysdale corpuscle. When Dr. Formad reports finding this cell in the fluid removed from an abdominal tumor, he feels strengthened in his diagnosis of ovarian cyst. He has not trusted to the cell alone, but has been greatly influenced by its presence or absence in making up a diagnosis in doubtful cases. In every instance in which Dr. Formad had reported finding the ovarian cell, operation had proved the tumor to be of ovarian origin. He would like to ask Dr. Drysdale if he still considers the cell

pathognomonic.

Dr. DRYSDALE still believed in the pathognomonic value of the ovarian cell. In his investigations he had met with but one exception to the rule, and that was in renal cysts. To prove that the cell could be relied on to establish a diagnosis, he would give one or two instances where it was impossible to do this except by its aid. In a review by Dr. Harris of the "Transactions of the American Gynæcological Society" in the American Journal of the Medical Sciences will be found this statement: "On one occasion Prof. D. Hayes Agnew gave Dr. Drysdale a fluid for examination in which he found the characteristic cell. Upon stating what he had found to Dr. Agnew, he was told that the fluid had been taken from the abdominal cavity, upon which he immediately said that the fluid must have escaped from an ovarian cyst, for it was ovarian. In this he was correct, as the cyst had a small hole in it, as if made with a punch, and the fluid had escaped as claimed." In another case Dr. Drysdale received a letter from Prof. Matthew D. Mann, of Buffalo, New York, with a specimen of fluid consisting of eight or ten drops which the doctor stated was all that he could obtain by aspiration. The tumor had been diagnosticated by other surgeons as one of uterine fibroma, and consisted of a large solid mass which filled the pelvis and abdomen as high as the umbilicus. The history and symptoms all pointed to a uterine fibroid, and the patient was in such a precarious condition that an exploratory operation was considered unjustifiable. An examination of the fluid by Dr. Drysdale showed the presence of the ovarian cell. This determined Dr. Mann to operate. He found two ovarian tumors, which he removed successfully, and the pa-tient recovered. "Without the microscope no certain diagnosis could have been made, except by resorting to an exploratory incision." These cases—and he could give many others like them-were sufficient to show the diagnostic value of the cell.

Dr. Beates remarked that it was a matter of extreme regret to him that Dr. Drysdale

fluid: it was due to the fact that the neoplasm was regarded as ovarian, and the specimens of fluid were not preserved. At the autopsy, the growth was presumed to have arisen from the left ovary, and none of the fluid was kept. Later study of the specimen disclosed the amygdaloid mass situated in an atrophied membranous structure, closely approximated to the uterus. The microscopic examination of this determined its ovarian character to the mind of Dr. Formad, which conclusion dissipated a doubt in his mind and confirmed his belief of its being the left ovary. He thoroughly appreciated the strong probability of error lia-ble to occur in positively diagnosticating by differentiation the Drysdale corpuscle from similar bodies, as the pyoid body of Lébert, but the facts that treatment with acetic acid only had the effect of rendering the whole corpuscle very slightly clearer and disclosed no nucleus, and that ether added to the fluid and the mixture thoroughly agitated for several minutes had the effect of simply rendering the corpuscle paler, had convinced him that the bodies were the corpuscles in question. There is, by very extended experience, developed a capacity to differentiate by a varying degree of opacity. Dr. Formad believed these corpuscles to be those of Drysdale. The striking phenomenon, if this be an ovarian cyst, is in the fact that primarily it was purely cystic, typically so, and that during the last year of its existence the cyst-wall throughout its posterior seven-eighths assumed a myomatous development. If this did not occur, the myomatous wall must have originated at the fundus uteri and gradually permeated the cyst. Either of these processes is almost incredible, and certainly exceptional to known clinical facts. The true uterine origin must not be forgotten. That a proper conception of the tumor may be formed, it should be compared to a large pumpkin with a wall varying in thickness from one to three inches. For an area of about nine square inches at the umbilical region the ordinary cyst-like structure formed as it were a drum-head. This wall is not fibromatous, but purely myomatous. Dr. Goodell had seen this patient and diagnosticated the tumor to be ovarian.

Dr. B. F. BAER exhibited a specimen of

HYPERTROPHIED UTERINE MUCOUS MEM-BRANE.

R. H., æt. 30, married twelve years, sterile; puberty occurred at the age of twelve; slight dysmenorrhœa from the first, and since her marriage the difficulty has been increasing, so that during the last few years the pain has been very severe. The menstrual flow, which had always been rather profuse, especially since her marriage, has for more than a year been irregular in time and quantity; sometimes it continues two weeks very freely, when she is so prostrated as to be compelled: did not have an opportunity of examining the | to remain in bed to regain strength. She com-





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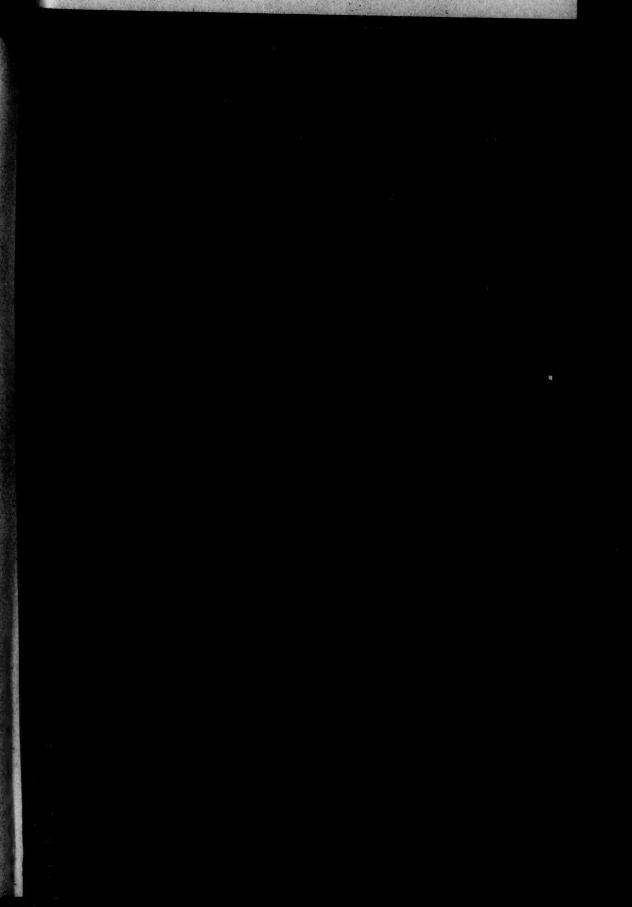
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plained of a severe, sharp pain in the region of the left ovary, radiating to the groin and anterior part of the thigh, and to the præcordial region and side of the head to the top-head. She had great dragging in the pelvic and pain in the sacral region. During her periods the mammary glands would swell and become very tender and sore. Coition had been rendered almost intolerable on account of pain during the act, and because it increased the pain in the left ovarian region and induced a sensation of nausea and faintness. She had souch dread of sexual congress that an interval of months would sometimes elapse between the acts. Her weight had decreased from one hundred and forty-six to one hundred and seventeen pounds, and her appetite and digestion were poor.

Examination showed the cervix uteri to be near the vaginal orifice, somewhat elongated and conical. The os was patulous, the body of the uterus very much hypertrophied and retroverted. The left broad ligament was contracted and the corresponding ovary prolapsed, larger than normal, and very tender to pressure. The sound indicated a uterine depth of three and a half inches, and the cavity was large and soft. The organ was mobile. Ether was administered, the cervix dilated by means of Ellinger's dilator, and the endometrium was carefully curetted, removing a large amount of the most enormously hypertrophied mucous membrane. Nitric acid was applied. Under a regulated diet, with rest, complete relief followed, with

freedom from hemorrhage and pain.
Dr. W. H. Parish would like to hear the result in Dr. Baer's case after the lapse of three or four years. Two or three years ago, he had reported before this Society a similar case, in which, after dilatation by spongetents, he had removed a large quantity of endometric growths and applied nitric acid. The treatment was followed by an apparent cure, which lasted for some months, after the lapse of which the previous condition returned. The same treatment, followed by relief and subsequent relapse, has been repeated several times. Good microscopists have pronounced the growths benign. Dr. Goodell has, however, given it as his opinion that it will ultimately become malignant. Dr. Parish has been gradually coming to the same opinion.

Dr. Beates has treated a woman, æt. 33 years, who suffers from anteflexion of the uterus, menorrhagia, and granulations of the endometrium. The microscopic appearance is benign. After treatment by means of the curette and nitric acid, no hemorrhage occurred for four months; the treatment was repeated, a laceration of the cervix was closed, and seven months later the patient became pregnant; abortion occurred at two and a half months, and the granulations and hemorrhages have returned.

Dr. BAER remarked that these cases are very common; they are seen every week at the clinic. They are usually benign, but sometimes become malignant from loss of blood and a run-down condition of the system. Adhesions or some other obstacle to the free return of the venous blood from the uterus may exist, or the ovaries may be diseased, and these causes will bring on the relapse, no matter how perfect the relief may be. In many cases the cause is flexion, the effect is sterility. It is an exaggeration of a purely physiological process. It may be benign in its incipiency, but may become malignant later on.

W. H. H. GITHENS,

Secretary.

PHILADELPHIA CLINICAL SOCIETY.

STATED MEETING, APRIL 25, 1884.

The PRESIDENT, HENRY BEATES, JR., M.D., in the chair.

DR. HANNAH T. CROASDALE reported a case of "Vesico-Vaginal Fistule with Inverted Bladder."

The record which is brought to your notice this evening is that of a case which perhaps is possessed of more than ordinary interest from two circumstances: first, from the enormous size of the opening in the septum; and, secondly, from the fact that from the orifice a bright round body protruded, which was discovered to be the bladder inverted. The patient, M. F., æt. 47, was admitted to the Woman's Hospital, October 11, 1881. She was married at the age of 25, and had one child still-born. The labor was instrumental, and incontinence of urine occurred soon after it.

For this trouble and great discomfort the woman never sought relief, and speaks only of her present suffering having begun one year before admission. This suffering had been so intense that she had been obliged to keep her bed for this length of time. The journey from her home had been made on a bed. Her appearance was deplorable. She had constant pain in the lower part of the abdomen, bowels were constipated, appetite poor, face anxious, and she was constantly distressed lest the bed or her clothing be moved and thereby her sufferings be increased. It seemed almost hopeless to expect to do anything for the poor woman's relief, so disturbed was her health from her desperate condition.

Nausea and vomiting were almost constantly present. Her pulse on the day following that of her admission was 65, temperature 99°, and respiration 26. The quantity of urine in twenty-four hours could not be ascertained. The color was pale yellow, specific gravity 1002, reaction alkaline, and there was a trace of albumen. After ineffectual attempts, she was finally etherized and thoroughly examined October 29.

The tumor which was so exquisitely sensitive was the inverted bladder, and the exposed mucous membrane was greatly inflamed, and bled readily on being touched. The openings into both ureters could be distinctly seen. The mass was grasped and by gentle taxis was reduced, and retained by the slight support afforded by one of Skene's glass stylets, made to pass through the urethra with the distal extremity resting on the upper edge of the fistulous opening. A vaginal glass plug was introduced into the vagina to aid in supporting the bladder. The inflamed condition of the parts forbade any further procedure at this time.

On the 30th of November she was again etherized, and placed in the lithotomy posi-tion, and the edge of the fistule, which was about five centimetres in diameter, was carefully pared, bevelled from the vesical margin, giving a broad surface on the vaginal septum, and twelve sutures of silver were introduced. It was necessary, before closing the fistule, to liberate adhesive bands at either angle, and then the margins of the opening were closed by the sutures and secured by perforated shot. A self-retaining catheter was introduced, to which was attached a piece of rubber tubing for conveying the urine to the urinal. The patient was then placed in bed, and one-sixth of a grain of morphia sulphate given hypodermatically, and she was ordered lime-water and milk every two hours.

The following day, December 2, there was much vesical tenesmus, which gradually subsided, and nothing especially worthy of note occurred until December 7, when the sutures were removed. Union was not perfect at either angle, and in the centre there was a small orifice which admitted the passage of

January 6, the patient was again etherized, the edges of the three minute openings freshened, and fine silver-wire suture introduced. The central and right openings promptly closed after this second operation, but the left, just at the site of the ureter, admitted the

passage of a Snelling's probe.

Then, January 20, February 3, and March 28, I operated, hoping to close this minute orifice which still remained, and which still allowed of the passage of urine when the bladder was filled. Not one of these efforts was followed by any better success. These attempts were always made with a probe carried through the urethra into the opening in the ureter, in order to prevent wounding or closing the latter.

It was now thought best to send the patient home and encourage her coming again in the autumn, as her stay had already been much prolonged beyond the usual time for keeping patients in the hospital, and she was discharged May 8, 1882, quite content on her part with the result of the many operations,—six in all. After several months, however,

the urine ceased to pass through this opening, probably from the contraction of cicatricial tissue,

I find many contributions to the surgical literature for the relief of vesico-vaginal fistule, but nowhere have I found any record of a case of an inverted bladder through the fistulous orifice.

#### PATHOLOGICAL SOCIETY OF PHILADEL-PHIA.

THURSDAY EVENING, MAY 23, 1884.

The President, Dr. James Tyson, in the chair.

A case of Paget's disease. Presented by Dr. W. G. MACCONNELL for Dr. JOSEPH HEARN.

THIS breast was removed at the Jefferson College clinic by Dr. Hearn, Saturday, May 17, 1884.

May 17, 1884.

History.—Mrs. B., aged 39 years, had been married for nineteen years, and had borne four children and had had one miscarriage. No other member of her family had ever suffered from any form of tumor. Four years ago, following a pustular eruption which she noticed on her abdomen, a lump was observed in the left breast, which was the seat of a lancinating pain of an intermittent character. Previous to the discovery of the lump an eruption of an eczematous nature was noticed. It had existed some seven or eight months before she noticed the lump. The nipple, at the time of the operation, was thoroughly retracted,-indeed, had melted away. There was no axillary involvement, although there was noticed a gland at the upper and inner quadrant of the breast. On section of the tumor, after its removal, several small nodules, of a hard, fibrous consistence, were encountered. Microscopically I found them to be the site of carcinoma of a scirrhous nature. The gland revealed a similar condition.

#### Colloid carcinoma.

This tumor was removed by Dr. Hearn, at the Jefferson Medical Hospital, about one week previous to the removal of the other breast.

History.—Miss B., æt. 67, general health good, family history that of phthisis. No other member of her family had ever suffered from any form of tumor. About three years ago she felt a lancinating pain in the right breast. On examination, she found a lump which was hard, roundish, and about the size of an English walnut. It constantly tended to increase. At the end of eighteen months, it had attained the size of an egg. She then resorted to a quack, who applied a salve, which she states caused some bleeding. Two months before her admission to the hospital, she states that the breast began to

gather, and one week previous to the operation it broke, and a dark-greenish fluid escaped, which was afterwards followed by the
extrusion of a mass of greenish-colored
sloughs. The growth was attached to the
overlying skin, but not to the pectoral tissues,
beneath. The subcutaneous veins were enlarged and prominent. No glandular involvement existed. On section, the tumor was
found to be densely hard, and the seat of
small cavities filled with a glairy, gelatinous,
semi-solid fluid. Microscopic examination
showed alveoli filled with epithelium that had
undergone fatty degeneration, not a few of
them showing the peculiar laminated appearance peculiar to colloid. The connective
tissue of the stroma was in a state of active
proliferation, due probably to the inflammation resulting from the cystic change already
mentioned.

Sarcoma of the testicle. Presented by Dr. G. DE SCHWEINITZ.

This growth was removed from S. H., aged 37, married, a patient of Dr. John Ashhurst in the surgical ward of the University Hospital. His father and mother are living and in good health. His grandparents died in old age, having led healthy lives. Of his two brothers and two sisters, all are living, and three of them have been thus far in good physical condition. One sister had a growth removed from the orbit, probably a sarcoma, which is now beginning to recur. His own health has been good. He denies any venereal disease. Two and a half years ago he first began to notice a globular swelling at the bottom of the left testicle, which gradually increased in size until eight months ago, since which time the growth has been rapid, so that at the time of operation the circumference of the testicle measured fourteen and a half inches. Pain has been insignificant until last April, since which time he has suffered with severe dragging pains. The inguinal glands on both sides were slightly enlarged. The growth occupies the body of the testis, being surrounded by the tunica albuginea and tunica vaginalis, which are intact. It is a large, somewhat irregular, moderately soft, blood-stained mass. In one end there is an area of cystic degeneration. Microscopic examination shows this tumor to be a sarcoma of the round-cell variety, the cells being moderately large, containing oval nuclei and sometimes nucleoli. In places a faint reticular net-work is demonstrable, producing a picture similar to the lymph-glandlike round-cell sarcomas.

THE PREVENTION OF BED-SORES.—A solution of gutta-percha in chloroform (four to thirty) is useful to protect the skin over projecting bones and to prevent bed-sores in wasting diseases.

#### REVIEWS AND BOOK NOTICES.

A HAND-BOOK OF THERAPEUTICS. By SID-NEY RINGER, M.D. Tenth Edition. New York, William Wood & Co., 1883. 8vo, cloth, pp. 688.

The present edition of Ringer's Hand-Book has been carefully revised, and has received many valuable additions. In the first part there has been inserted a brief account of the symptoms of disease, with sections on the tongue, the pulse, the skin, the temperature of health and disease, chronic fever, and dropsy; which is followed by a consideration of various therapeutic expedients,—the different varieties of baths, poultices, and fomentations, the uses of ice, spinal ice-bag and hot-water bag, the medical uses of water, enemata, acupuncture, and counter-irritation. This occupies about one-fifth of the work, the remainder being devoted to a consideration of the various articles and groups composing the Materia Medica.

This work is cyclopædic as regards the effects, physiological and therapeutical, of remedies; but its wealth of material has compelled in some places a baldness of statement which might be misleading to a new beginner. For instance, the following appears on page of: "Rheumatic fever with other complications generally ends favorably, no matter how serious the aspect of the patient. Pneumonia, even when double and further complicated with extensive pericarditis, sel-dom destroys a patient." Such statements from an acknowledged authority are too apt to beget a false confidence in the student, and an underestimation of the responsibilities of the practice of medicine. We should also consider the following as dangerous doctrine to inculcate (p. 358): "A little rum and milk an hour before rising is a good prop to town-living women, to whom dressing is a great fatigue, who, without appetite for breakfast, suffer from morning languor and exhaustion, often lasting till mid-day." This condition we should be more apt to consider the result of secret indulgence in spirits than as a warrant for using them. It is just such patients, however, that are most eager to have their physicians prescribe stimulants, as an excuse for continued self-indulgence.

It may seem invidious to attempt to offer criticism upon a work the popularity of which has demonstrated its application to the wants of the practitioner; but, while fully acknowledging its usefulness and worth, we recognize an apparent disposition to pay too great attention to symptoms, without due regard for the accompanying pathological conditions,—with perhaps too much of a tendency to look upon certain phenomena as constituting "indications" for certain drugs. To our mind, Nature never "indicates" remedies: if she did, the practice of medicine would resolve

itself into the application of specifics. The true principle of therapeutics would rather seem to be to determine in what manner Nature might effect a cure, and then to select from a number of remedies the one in particular which is best adapted to favor this end in the speediest, most agreeable and skilful manner. As an illustration of what we mean, we take at random (from page 166). Speaking of nervous subjects, subject to despondency and bad dreams, the author says that "this condition often arises from overwork, grief, worry, or too long residence in town, or want of a change.

"The bromide of potassium will always cure this group of symptoms. Their occurrence, independently or associated with other illnesses, as the change of life or migraine (sick headache, nervous sick headache, bilious headache), is a distinct indication to give the bromide." One would think that the indication, if correctly interpreted, would be to supply the desired change of scene or to break into the monotony of town

life by a trip to the country.

In short, there is too much reliance displayed upon the pharmacological management of a disorder, and too little intimation given that there is also great need of moral and psychic control. Good medical advice should include both of these factors. The great Dr. Rush never neglected to enlist his patient's intelligent interest in the effects of his remedies, and he did not hesitate to ascribe much of his success to this fact. It is an evidence of knowledge to select the appropriate drug for the "indication;" but it is an evidence of wisdom to obtain the same effect, if possible, without the aid of the drug.

TRAITÉ DE L'AFFECTION CALCULEUSE DU FOIE. Par le Docteur Jules Cyr, Médecin Inspecteur adjoint à Vichy. Small 8vo, pp. 345. Paris, V. Delahaye et Lecrosnier, 1884.

(A CLINICAL TREATISE ON GALL-STONES.)

The author, well known by his writings on diabetes and on diseases of the liver, and by his translation of Murchison, has embodied in the present compact volume the results of his experience in those disorders which give rise to, or result from, biliary calculi. Engaged in the practice of medicine at Vichy, he has had peculiar opportunities for the observation of disorders of this kind, and his work, which claims to be rather a monograph than a systematic review of the actual state of science in this field, reflects on every page close observation and large experience. In this respect it possesses for the reader a charm such as no mere compilation, however excellent, can afford.

Looking at his subject from the clinical stand-point, the author passes rapidly over the chemistry and physics to dwell with fulness affecting the upper air-passages.

upon the etiology and pathogenesis, the symptomatology, the diagnosis and prognosis, the course, duration, complications, and terminations of the group of disorders indicated by the comprehensive but scarcely translatable term, L'Affection calculeuse du Foie. Singular skill is displayed in the treatment of the subject, which advances, so to speak, in two columns,—one relating to the causative conditions, the chronic state, the other to the active results, the acute outbreaks.

But that part of the book devoted to the treatment will be read by the practitioner with especial interest, and will well repay perusal. The hygienic necessities of persons liable to the formation of biliary calculi are fully set forth, and minute directions are given as to diet, drink, and exercise.

Under the head of the medical treatment proper, the author expresses a well-founded preference for the treatment of these cases at Vichy. Alas! how many of the faithful never reach Mecca! We would fain review rather than thus briefly notice this book, were space at our disposal. It is a pleasure to commend it as a terse, well-written, practical monograph upon the subject, which would be welcomed by the profession in a English version.

J. C. W.

GRUNDZUGE EINER PATHOLOGIE UND THE-RAPIE DER NAREN-, MUNDRACHEN- UND KEHLKOPFKRANKHEITEN FUR AERZTEN UND STUDENTEN. Von Dr. MAXIMILIAN BRUGEN. 8vo, pp. 272. One Hundred and Fifty-Six Illustrations. Leipsic, Urban & Schwarzenberg, 1884.

The author, who is almost as well known on this side of the Atlantic as he is in Europe, through his many valuable contributions to the literature of laryngology, has embodied in the volume before us the result of his extensive experience in the treatment of diseases of the upper air-passages, and has given us a book which must be ranked among the best of those which have been lately written on the subject of which it treats.

It opens with a consideration of the anatomy and physiology of the nasal, aural, and laryngeal cavities and their appendages, and we find in these chapters many details which are valuable and suggestive and which are not to be found in the larger text-books on anatomy and physiology.

The second part comprises a full and detailed description of the instruments employed in laryngoscopy and rhinoscopy, and of the method of using them in the examination of the larynx and nasal cavities, and in the treatment of diseases affecting these cavities.

The third part discusses the general and local therapeutics as applied in the treatment of the diseases of the throat and nose, while the remaining portion of the book is devoted to a consideration of the different diseases affecting the upper air-passages.

As an appendix, we find a most complete bibliography of books and pamphlets on the subject, comprising over three hundred titles.

The illustrations, most of which are reproductions of cuts from other works, are nevertheless well selected and admirably executed, giving the work double value on account of the clearness with which they illustrate the text. The style, although generally clear and to the point, is in some instances involved, and it becomes difficult to fathom the exact meaning of the sentence. This, however, is a fault, perhaps, not so much of the author as it is of the language in which it is written.

ELEMENTARY PRINCIPLES OF ELECTRO-THER-APEUTICS FOR STUDENTS AND PHYSICIANS. 8vo, pp. xviii, 426. McIntosh Galvanic and Faradic Battery Co., Chicago, 1884.

This company makes a battery, galvanic, faradic, or static, which is reliable. Their accessories are equally good, and to these is now added a treatise of worth to all who em-ploy electricity in practice. The method of discussing fundamental points in electro-physics is novel and good, the description of the mechanics of batteries is unusually clear, and the two are fully illustrated by excellent engravings. The indications for the use of either current are well defined, and the motor points are more clearly shown in the diagrams than in any previous work. As a rule, the references in special applications are to good authority, but we miss many which are superior and which should have been included by the compiler, as the literature of electro-therapeutics has been quite full for a year or two past. As a whole, the book is readable, precise, and a safe guide to inquirers. It is handsomely got up in type, paper, and binding, and will repay its cost to any purchaser. W. R. D. B.

#### GLEANINGS FROM EXCHANGES.

REMARKABLE RESULTS FROM IODOFORM APPLICATIONS IN ERYSIPELAS.—In the Practitioner for May, 1884, is a communication from Dr. C. Clark Burman, in which the topical application of iodoform in collodion (one to ten) in facial erysipelas is praised very highly. Four cases are reported in which the good effects of painting the affected surface and a little beyond with the iodoform were remarkably manifested. The relief to the pain and burning was almost immediate, and the inflammation in the affected area rapidly subsided: in short, the application is cooling, relieves pain, and apparently rapidly arrests the disease. The disadvantages of temporary disfigurement, and of the odor, are very slight in comparison with its good effects. Tincture of iron was given internally in three

of the cases, but in the fourth no internal treatment was given beyond a dose of sulphate of magnesia, yet by the next day after the use of the iodoform the erysipelas had subsided.

GASTROTOMY OR GASTROSTOMY.—Under the heading of "Gastrostomy," a case is reported in the British Medical Journal, in which Mr. Knowsley Thornton removed a mass of hair from the stomach of a young girl by direct incision, closing both the superficial and deep wounds by interrupted and continuous silk sutures, with rapid healing. The term gastrostomy is evidently misapplied here: probably it is a misprint, since it is intended to imply, as originally suggested by Prof. John Ashhurst, of this city, the establishment of a gastric fistula for the purpose of supplying nourishment to the patient, thus forming an artificial "os,"—"gastrotomy" for this purpose becoming "gastrostomy."

#### MISCELLANY.

TESTIMONIAL TO PROF. STILLÉ,—The profession of Philadelphia recently tendered to Prof. Alfred Stillé the honor of a public dinner in commemoration of his retiring from the chair of Practice of Medicine in the Medical Department of the University of Pennsylvania. The dinner was given at the Hotel Bellevue on the 5th instant,—a little later than at first intended, on account of the lamented death of Prof. Gross, who was expected to preside. The chair was actually filled by Prof. Da Costa, by invitation of the committee in charge, to whom great credit is due for the perfection of the arrangements.

At the close of an elaborate repast, letters were read from absentees regretting inability to attend, and expressing sympathy with the object of the meeting. Among these were communications from Drs. H. I. Bowditch, Oliver Wendell Holmes, S. G. Moses, John L. Atlee, and Edward Hartshorne. Among the guests in attendance from other cities were Drs. Austin Flint, of New York, George C. Shattuck, of Boston, J. S. Billings, of Washington, and Traill Green, of Easton. The table was beautifully decorated, and was set in the shape of half a parallelogram, with an additional arm down the centre. Covers were laid for seventy-seven, and nearly every seat was occupied.

Prof. Da Costa delivered the opening address in a few appropriate remarks that were received with evident approval. He regretted the absence of the master-mind to whom by common consent had been assigned the agreeable task of presiding,—for a great man befits a great occasion. Then, addressing himself to the honored guest of the evening, he said,—

"In truth, it is a great occasion which calls

us together. When, at the end of a long and distinguished career, those who have labored with or alongside of a man, who have been his pupils, his associates, his colleagues, have striven for the same offices, have vied with him in generous rivalry, voluntarily meet to testify their friendship and to mark their approbation of his life, it is, indeed, a memorable event, not only to him, but to his calling. And we are giving all that we have to give. We cannot bestow on you an order of merit, such as a government in some countries might bestow. No ribbon of the Bath, no ensign of the Legion of Honor, no Iron Cross, can be placed on your breast. Nor can we crown you with a civic crown, with its appropriate inscription ob cives servatos. your crown of triple oak, accorded to you now by the representatives of your own profession for a life of valuable services, will be no less a mark of pre-eminence because it will have to rest invisibly on your brow.

"It is difficult, in your presence, to speak of the title you have to this and other distinctions without appearing to violate the canons of good taste. But you must look upon yourself as being with us on an occasion in which your claims are being summed up at the bar of American medicine,—claims not alone for to-day, but for posterity, and in which the advocate may plead more earnestly because he feels the consciousness of an assured ver-

dict "

Next, passing in review the various fields in which Dr. Stillé had become distinguished, he referred to him in his capacity as the scholarly and discriminating author, the erudite and conscientious professor, and the active and untiring worker for the good of the profession, "it being not the least of his claims that he was prominent, none more so, among the founders of the body which has done so much to bring the medical profession of this country into unison,—the American Medical Association."

The generous gift of the bulk of his large library to the ancient university with which his name is indissolubly connected must not remain unmentioned among his public-spirited acts. "But," the speaker continued, "it is not Stillé the author, the teacher, the worker, whom we hold dear; better than all, there is Stillé the MAN, whose life of probity, high sense of honor, and uniform courtesy have endeared him to all." After a passing allusion to the wonderful development and growth of medical science, and the prolificness of medical schools and medical journals, he addressed himself more directly to Dr. Stillé, and said, in conclusion, "Honored guest,-Be it in connection with the medicine of our country, or, better, as a summary of your whole career, it seems not inappropriate to apply to you the words of Cicero: 'Omnia summa consecutus est, virtute duce, comite fortuna.' If you have attained the highest rank, with

virtue leading the way and fortune attending, it will so remain to the end. During the many years of vigorous life which we fervently hope are still before you, wherever you elect to pass those years, whether in the seclusion of your home and in lettered ease, or in visiting the scenes of former travel and early studies,—in whatever clime, whatever skies may cover and sun shine on your path,—with you will be the affectionate regards of those who surround you to-night, and of the far larger body of which we are only the temporary representatives; and you may know and feel that hundreds are joining now and will always join us in the wish, 'Health and long life to Professor Alfred Stillé!'"

Dr. Stillé, with evident emotion, rose to thank the speaker and the company for the eloquent and cordial greeting he had re-ceived, and said that his happiness would have been without alloy were it not for the absence of one to whom allusion had already been made, who had passed away venerable with years and resplendent with honors nobly won; to whom he had been under obligations for a long series of acts which were among the most grateful commendations of his professional life. Continuing, he said, "You, Mr. Chairman, have mentioned many of the positions of trust and honor conferred upon me at various times, or that I have received; yet it was to the favor of my medical brethren that I owe it all. I am free to acknowledge that this was the making of my history. Whatever I might have attempted, I should have achieved but little without their encouragement and approbation. Now, having reached that period when I may seek a well-earned repose in the evening of an eventful professional life, this goodly company, these cheerful and hearty greetings, these glowing lights and festive ornaments which accompany my retirement at the appointed period of threescore years and ten, appear to me like the flowering of that plant which is fabled to bloom but once in a century. All else in my professional life seems tame by comparison. The column, such as it was, that I have endeavored to rear in the temple of Æsculapius, to-night is crowned with a capital which is rich in the adornment of the Corinthian style. I can only trust that the plainness of the subject will do no injustice to the richness of the decoration. In looking from this eminence over the road I have travelled since my entrance into my professional life, no doubt is left that in most lives a mere accident often determines their scope and issue. I am sure that it was so with mine. While still a medical student, two young men, fellowtownsmen with me, returned from Paris glowing with fire they had caught in the then centre of medical science. Gerhard and Pennock were the apostles of the school of observation, and under their preaching I became a willing convert. As soon as possible, I hastened to the charmed scene of their intellectual labors, further stimulated thereto by the traditions of men like Jackson, Bowditch, and Holmes, and enjoying the salutary society and co-operation of one who still survives, and to-night is at my side to do honor to his old friend and to your invitation,-Dr. George C. Shattuck, of Boston,

"There is still another before me, venerable with all save the weakness of age,-ex-Medical Director of the United States Navy Dr. W. S. W. Ruschenberger, with whom I made that homeward voyage of six weeks' duration which cemented a friendship which has survived the test of tempus edax rerum. It is not often given to men to renew associations such as these at the expiration of nearly half a century; to feel that time, which destroys so much, often spares so much of that which is

best in our experience of men.

"In one of my summer holidays abroad, it was my lot-less vulgar then than now-to climb the Alps and note the expedients used by the mountaineers in ascending the icy peaks. I saw with what laborious industry they cut foot-holes in the slippery steep and thus slowly but steadily mounted to their destination. I was profoundly impressed by this method, and said to myself, 'This, surely, is the way to hew the road to fame and fortune, and whether the point to be reached be the topmost peak of all, or some humbler hill-top on the way, it is clear that, whatever else may win, improbus labor omnia What seemed revealed to me then among the sublime silences of nature has been echoed by a thousand voices along the whole pathway of my life. There is in my family a motto which runs 'Innocenter, patienter, constanter,' and I can say that the value of steady, straightforward work, without regard to external surroundings, cannot be overestimated. This has been the keynote of my whole professional life, and what-ever success may have crowned my efforts is due to its truth, aided by the friendly encouragement of my colleagues. May the ideal crown of triple oak with which our chairman has honored me to-night preserve its freshness throughout my life, and be prized by those who come after me, as more precious than any material badge of gold or jewels!"

After Dr. Stillé had concluded his remarks, Surgeon J. S. Billings, U.S.A., was called upon to reply to the toast "Our Invited Guests." Dr. G. C. Shattuck answered to the sentiment "Old Friends." Drs. Flint, J. S. Billings, and Pepper were called upon personally, and made brief responses. The loving-cup was then passed from hand to hand, and the dinner was over. A very pleasant feature of the occasion was a presentation to Dr. Stillé of an autograph album containing the letter inviting him to the dinner, his reply, and the names of those who were present. The din-

ner to the distinguished professor, which is now part of the medical history of Philadelphia, was most creditable both in conception and in execution, and did honor to those who gave it, as well as to Prof. Stillé, whom all delight to honor,

### NOTES AND QUERIES.

#### THE DIASTATIC VALUE OF MALTINE.

The following results of analyses are furnished us for publication. They were made by competent chemists, and are given here in order to correct some misstatements made to members of the profession by interested parties at the recent meetings at Washington and elsewhere. They are published as a simple act of justice to the manufacturers of Maltine.

Report of a Comparative Determination of the Diastatic Value of Trommer's Extract of Malt and of Maltine:

"The two samples of malt extract were delivered to me in original sealed bottles, with the druggist's label attached to each.

in original scaled bottles, with the druggist's label attached to each.

"One-half gramme (= 7½ grains) of each extract was mixed with zoo.c. (= 6 oz.) of three-per-cent. starch-paste, and the whole kept in a water-bath at 45° C. (= x15° F.) for so minutes. The whole amount of the sugar in each of the flasks was then determined, and from this was subtracted the respective amount in the half-gramme of extract used. The remainder, which represents the actual amount of sugar formed from starch by the diastase, was in the case of 'Tromer's Extract of Malt, '0.470 gramme (= 7½ grains), and of 'Maltine,' 2.728 grammes (= 42 grains). The determinations were made by Fehling's solution, and the sugar calculated as maltose: as dextrose, it would be one-third less.

"J. R. Duggan, A.M., M.D.,

"Fellow is Chemistry."

"To the Members of the Pennsylvania State Medical So-ciety.

"At the meeting of the Pennsylvana State Medical Association held last week in Washington, four-ounce samples of two malt extracts were purchased by two prominent members of the Association and put into plain bottles, on which were the labels of a prominent druggist, from whom they were purchased. These samples were marked Nos. 1 and 2, and handed to Prof. R. Dorsey Coale for examination as to their diastatic or starch-digesting power.

"These tests were made with Fehling's solution, which is the only reliable method of testing malt extracts for diastase.
"At the close of the examination, Dr. William H. Coggeshall, of Richmond, Va., one of the physicians who made the purchases and watched every step of the process, anounced that No. 1 was Maltine, and No. 2 Trommer's Extract of Malt.

"The tests were made before many members of the Association on Friday, at the Exhibit Rooms, Masonic Hall.

"Philadelphia, May 14, 1884."

"Washington, D.C., May 9, 1884.
"Report of a Comparative Examination of the Diastatic
Activity of Two Samples of Malt Extract:

Activity of Two Samples of Malt Extract:

"The two samples of malt extract were delivered to me in plain four-ounce bottles, labelled respectively 'No. z' and 'No. z'.

"Equal weights—½ gramme—of each of the samples were mixed with 200 c.c. of 3½-per-cent. starch-paste (containing grammes of starch), and the mixture warmed at 130° to 140° F. in the same water-bath for twenty minutes.

"At the end of that time, the amount of sugar contained in each of the mixtures was determined by means of a Fehling's solution, the sugar being calculated as dextrose.

"No. z' was found to have formed 1.678 grammes of sugar; 'No. 2' was found to have formed 1.678 grammes of sugar; 'No. 2' was found those formed 1.678 grammes of sugar; 'No. 2' was found to have formed 1.678 grammes. The amount of sugar formatined in both of the malt extracts was previously determined, and this amount subtracted from the total amount of sugar formed from the starch by the diastase in the two cases, and thus represent the relative diastatic power of the two samples.

"R. Dorsey Coale, Ph.D.,

"R. Dorsey Coale, Ph.D.,
"Professor of Chemistry and Toxicology,
"University of Maryland."

#### OFFICIAL LIST

- OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM MAY 25, 1884, TO YUNE 7, 1884.
- MOORE, JOHN, LIEUTENANT-COLONEL AND ASSISTANT MED-ICAL PURVEYOR.—Ordered to perform, in addition to his present duties, those of Medical Storekeeper, San Fran-cisco, California.
- present duties, those of Medical Storekeeper, San Francisco, California.

  Johnson, Henry, Captain and Medical Storekeeper.—
  Relieved from duty at the medical purveying depot at San Francisco, California, and ordered to report for duty at the medical purveying depot, New York City, relieving Captain Andrew V. Cherbonnier, Medical Store-
- REGERIER, ANDREW V., CAPTAIN AND MEDICAL STOREKERPER.—On being relieved by Captain Johnson, will proceed to St. Louis, Missouri, and report in person to Captain George T. Beall, Medical Storekeeper and Acting Assistant Medical Purveyor, for duty at the purveying depot at St. Louis, Missouri, relieving Captain Beall of his duties as Medical Storekeeper. Paragraph 9, S. O. 128, A. G. O., June 3, 1884.
- FRYER, BLENCOWE E., MAJOR AND SURGEON.—Granted leave of absence for one year from July 1, 1884. Paragraph 7, S. O. 128, A. G. O., June 3, 1884.
- HALL, JOHN D., CAPTAIN AND ASSISTANT-SURGEOM.— Granted leave of absence for three months, to take effect on his arrival at St. Paul, Minnesota. Paragraph 8, S. O. 128, A.G. O., June 3, 1884.
- Heger, Anthony, Major and Surgeon.—Assigned to duty at Fort McHenry, Maryland, as post surgeon. Paragraph 1, S. O. 108, Headquarters Department of the East, June 2, 1884.
- BAILY, JOSEPH C., MAJOR AND SURGEON.—Now on leave of absence, is relieved from duty in Department of Texas, and ordered to report to commanding general Department of the East, for assignment to duty at Fort Monroe, Virginia, to relieve Lieutenant-Colonel Charles Page, Surgeon U.S. Army, on July 1, 1884, from duty at that station.
- at that Station.

  PAGE, CHARLES, LIBUTEMANT-COLONEL.—On being relieved by Major Baily, will proceed to Fort Leavenworth, Kansas, and report to commanding general Department of the Missouri, for assignment to duty as medical director of that department.

  Paragraphy to S.O. ver. A.C.O. Means and Paragraph 12, S. O. 125, A. G. O., May 29, 1884.
- WRIGHT, J. P., MAJOR AND SURGEON.—Directed to perform temporarily, in addition to his other duties, those of Medical Director, Department of the Missouri. Para-graph 2, S. O. 107, Headquarters Department of the Mis-souri, May 28, 1884.
- HUNTINGTON, DAVID L., MAJOR AND SURGEON.—During the absence of the Surgeon-General, directed to take charge of the office of the Surgeon-General and perform his duties. Paragraph 6, S. O. 129, A. G. O., June 4,
- Bentley, Edwin, Major and Surgeon.—Assigned to duty at Fort Clark, Texas, as post surgeon. Paragraph 1, S. O. 68, Headquarters Department of Texas, May 31,
- MIDDLETON, PASSMORE, CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for one month on surgeon's certificate of disability. Paragraph 2, S. O. 107, Headquarters Department of Missouri, May 28, 1884.
- KOERPER, EGON A., CAPTAIN AND ASSISTANT-SURGEON.— Assigned to duty at Fort Keogh, Montana Territory, Paragraph 1, S. O. 58, Headquarters Department of Da-kota, May 27, 1884.
- Hall., William R., Captain and Assistant-Surgeon.—
  Assigned to duty at Fort Stockton, Texas. Paragraph 1, S. O. 63, Headquarters Department of Texas, May 19,
- BARNETT, RICHARDS, CAPTAIN AND ASSISTANT SURGEON.—
  Now on sick leave of absence, is relieved from duty at
  Columbus Barracks, Ohio, and ordered to report to commanding general Department of the East, for assignment
  to duty. Paragraph 2, S. O. 129, A. G. O., June 4, 1884.

- CUNINGHAM, T. A., CAPTAIN AND ASSISTANT-SURGEON,— Ordered to relieve Assistant-Surgeon C. B. Byrne, U.S. Army, from duty at Fort Lewis, Colorado; Assistant-Surgeon Byrne, when so relieved, ordered to proceed to Fort Gibson, Indian Territory, and report to the post commander for duty. Paragraph 2, S. O. 112, Head-quarters Department of Missouri, June 4, 1884.
- Banister, J. M., First-Lieutenant and Assistant-Sur-Geon.—Granted leave of absence for one month and seven days, to commence June 23. S. O. 22, Headquar-ters Division of the Atlantic, June 5, 1884.
- McCreery, George, First-Lieutenant and Assistant-Surgeon.—Granted leave of absence for two months, with permission to apply to the Adjutant-General of the Army for two months' extension. Paragraph 3, S. O. 56, Headquarters Division of Missouri, June 5, 1884.
- LSON, GEORGE F., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—Relieved from temporary duty at Fort Canby, Washington Territory, and ordered to return to his proper station (Fort Walla Walla, Washington Terri-tory). Paragraph 2, S. O. 70, Headquarters Depart-ment of Colorado, May 26, 1884.
- OWEN, WILLIAM O., JR., FIRST-LIEUTENANT AND ASSISTANTSURGEON.—Having reported at these headquarters in compliance with Paragraph 5, Department Special Oraders, No. 62, current series, will return to, and take station at, Fort Stevens, Oregon.
  In addition to his duties at Fort Stevens, Assistant-Surgeon Owen will perform those of medical officer at Fort Canby, Washington Territory. Paragraph 1, S. O. 70, Headquarters Department of Colorado, May 26, 1884.
- LIST OF CHANGES OF STATIONS OF NAVAL MEDICAL OFFICERS FROM MAY 25, 1884, TO YUNE 7, 1884
- P. A. Surgeon F. Anderson, ordered to Navy-Yard, New York.
- P. A. Surgeon H. G. BEYER, detached from Coast-Survey Steamer "Blake," ordered to Smithsonian Institute for special duty.
- P. A. Surgeon W. H. Rush, detached from U.S. steam-ship "Despatch," and ordered to Coast-Survey Steamer "Blake."
- P. A. Surgeon L. G. HENEBERGER, detached from Navy-Yard, New York, ordered to U.S. steam-ship "De-spatch."
- P. A. Surgeon S. H. GRIFFITHS, ordered to U.S. steam-ship "Lancaster" on expiration of leave of absence.
- P. A. Surgeon M. D. Jones, detached from Naval Hospital, New York, and resignation accepted, June 15, 1885.
- Surgeon I. C. Wish, detached from Academy, and ordered to U.S. steam-ship "Constellation."
- P. A. Surgeon J. M. Murray, detached from U.S. steam-ship "Passaic," ordered to U.S. steam-ship "Constel-lation."
- P. A. Surgeon W. Martin, detached from U.S. steam-ship "Constellation," ordered to U.S. steam-ship "Passaic."
- P. A. Surgeon T. C. CRAIG, detached from U.S. steam-ship "Minnesota," ordered to U.S. steam-ship "Vandalia."
- P. A. Surgeon C. W. DEANE, detached from U.S. steam-ship "Vandalia," ordered to U.S. steam-ship "Minnesota."
- P. A. Surgeon J. H. Hall, detached from U.S. steam-ship "Minnesota," ordered to Naval Hospital, Brooklyn.
- Medical Director P. S. WALES, to continue present duty until August 1, 1884.
- Surgeon H. M. Wells, to temporary duty at Naval Labo-
- P. A. Surgeon E. H. MARSTELLER, detached from U.S. steam-ship "Vermont," ordered to U.S. steam-ship "Monongahela."
- Assistant-Surgeon H. B. Scott, commission to date from July 11, 1883.
- Assistant-Surgeon V. C. B. MEANS, commission to date from June 3, 1884.
- Assistant-Surgeon F. A. HESLER, commission to date from June 3, 1884.